MARCH, 1960

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EDITORIAL

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The Geneva 1959 I.T.U. Conference

The 1959 Administrative Radio Conference of the International Telecommunications Union, which completed its discussions and resolutions at its final Plenary Conference in Geneva during last December, will rank amongst the greatest of conferences convened to provide a workable system on an engineering basis for the communications services of the world; services which, during the last decade, have expanded beyond the expectation of most countries.

Elsewhere in this issue you will find the final report from John Moyle, VK2JU, who attended the Conference as the accredited W.I.A. representative with the official Australian Delegation.

Although once again the outcome of an international conference of nature has resulted in further reductions in the frequency allocations of the Amateur Service—particularly in Region III.—it is certain that the position would have been far more disastrous had it not been for the powerful Amateur representation at the Conference who jointly made certain that the Amateur Service received a just hearing along with the complicated problems of all the other communication services throughout the world.

Our own representative, John Moyle, has been highly praised for the part he took in "fighting" for the rights of the Amateur against pressure which can only be really understood by those who were present at the Conference. John Moyle did not spare himself in defence of the Amateur cause despite the fact that he was, even at that time, ailing with an illness from which it is now doubtful he will recover. Probably no greater tribute could be spoken of the work he did for and on behalf of the Amateur Service than the words of Mr. Prose Walker, Manager of Engineering of the National Association of Broadcasters of the United States of America, which appear in the correspondence columns of this issue of "Amateur Radio."

That the Wireless Institute of Australia was justified in making it possible to send a representative to this mammoth conference is beyond dispute; that we were able to send a man of the calibre of John Moyle is something for which the present and future generations of Australian Amateurs should be forever grateful. With a selfish disregard for his own personal health, John Moyle carried out his assignment on behalf of the Australian Amateur in a manner which can only leave us all feeling peculiarly humble. Even when he returned and underwent a most serious operation, his tenacity of purpose and never-ending interest in Amateur Radio drove him, under extremely uncomfortable circumstances, to write his final report to you . . . the Amateurs of Australia.

We shall never forget what John Moyle has done for the Amateur Service.

FEDERAL EXECUTIVE.

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Sideband Reception Without Tears

LINDSAY DOUGLAS,* VK2ON

Can you receive sideband so that it sounds like a.m.?

Can you resolve the "duck talk" with an ordinary receiver?

Can you overcome the critical tuning of a sideband signal?

The gadget to be described will, in the writer's opinion, make up for the deficiences of your ordinary receiver when resolving a good single sideband signal. Should reception of double sideband be required, additional selectivity is needed as provided by a Q multiplier.

The device is a very stable oscillator or frequency meter operating from 1.75 to 1.9 Mc. In operation the sideband station is tuned in roughly using the b.f.o. of the receiver, then the front-end injector is switched on and adjusted for zero-beat. The b.f.o. is now switched off. The a.v.c. on the receiver can be left on and the attenuator adjusted so that there are no S meter variations during modulation. Perfect a.m. quality should result with any good s.s.b. signals. This home-brew front-end injector has been in use at the writer's station for nearly a year and has given complete satisfaction. Its stability is many times greater than that of the normal receiver, a BC342.

CONSTRUCTIONAL DETAILS

The old work-horse, a Command transmitter, frequency range 4.0 to 5.3, is converted and padded to the low frequency of 1.75 to 1.9 Mc.

The relays, roller inductor, tank coil, and unessential wiring of the Command transmitter are removed. Parts remaining are the variable condensers and the shielded coil. The two ganged condensers are connected in parallel. The 6AM6 miniature 7-pin valve socket is mounted on a small bracket, preferably aluminium, behind the front panel and above the chassis. In this way any heat generated is kept as far as possible from the frequency-determining components. No doubt any other high-Gm valve could be used in place of the 6AM6, such as 6BX6 or 6AC7.

The fixed condensers (0.0014, 0.008, and 0.005 μF.) should be of the silvered mica type, especially the 0.0014 μF. These can be obtained but may have to be especially ordered. For temperature compensation a negative co-efficient 200 pF. is used shunting the 0.0014 μF. If this gives over-correction, then a suitable value of silvered mica condenser such as 500 pF. is inserted at "X" and the difference re-applied across the 0.0014 μF. The powdered-iron slug of the Command transmitter allows the lining up of 4.0 on the dial with the 3.5 Mc. second harmonic, then the dial reading of 5.3 should be about 3.82 Mc.

Temperature compensation can be fairly quickly reached by taking a reading against a crystal frequency, then wrapping the injector, with a thermometer, in newspaper and placing in the refrigerator for 45 minutes. This should reduce its temperature to 45 or 50 degrees F., sufficient to take a further dial reading against the crystal. When suitably compensated, it will be found that the compensation is slightly insufficient at 4.0 and slightly in excess at 5.3 dial readings. Compensation is only required against changes in room temperature as the oscillator generates so little heat.

As a precaution, a small hole, valve-socket size, is cut directly above the 6AM6 to allow ventilation. A thermometer placed above the 1625 sockets showed no registerable heat transfer from the 6AM6 oscillator. You will see that the Command transmitter case is well supplied with louvres.

Note carefully two things about the plate load:

(1) One of the two r.f. chokes is slug-tuned (roughly) to 14 Mc. to boost this harmonic.

(2) A 25,000 ohm resistor shunts the r.f. choke chain. This is essential in order to prevent frequency drift when the output attenuator is varied.

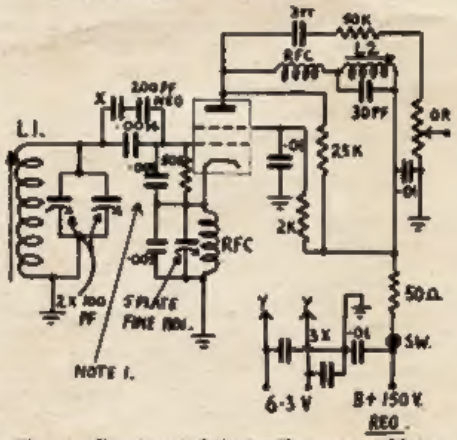

Fig. 1.—Front-end Injector/Frequency Meter.
L1—Adjust slug so 4.0 on dial equals 3.5 Mc.
L2—Tune slug to 14 Mc.
Valve type—6AM6.
Value of the output attenuator is 20K.
Note 1.—Place 0.008 and 0.005 μF. fixed condensers at rear below chassis.

The output terminal is connected to the antenna terminal of the receiver. If signal cannot be sufficiently attenuated, the insulated wire can be wrapped around terminal to give capacity coupling.

This instrument, after calibration, may be used as a frequency meter of very useful accuracy as it becomes stable 25 seconds after switching on. It is also handy as a marker to indicate where a station will re-appear.

Should the front-end injection be not quite sufficient to avoid overmodulation effects (as for strong night signals on 7 Mc.), the receiver-antenna switch can be opened.

One peculiarity the writer has not been able to eliminate is its reluctance to begin oscillation over the region 3.75-3.82 Mc., after switching on. Oscillation began readily on touching the grid with a lead pencil—accordingly a stiff wire from the grid was extended to a small hole in the front panel for a little pencil stimulation if required. The difficulty is to arrange for ready oscillation at the high frequency end, yet to avoid squeezing at the low frequency end. This is only a minor defect however.

The oscillator is not very microphonic or sensitive to pressure on the aluminium box, because of the large capacity employed. A 50 pF. condenser in the grid lead was tried and discarded. It worked much better without this.

You will notice a five plate trimmer connected across the 0.005 μF. capacitor. This is for fine adjustment of frequency. It allows one to get "spot-on" with resulting a.m. quality. Various 0.01 μF. by-pass capacitors have been included to prevent direct pick-up via the receiver power supply. Power is obtained from the receiver power supply with the 150 volts regulated.

The circuit of the front-end injector is a modification of a v.f.o. appearing in an article by W4ELZ in "QST," October 1957.

* 5 Masons Parade, Gosford, N.S.W.

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● Please pay your Subscriptions PROMPTLY when due. Failure to do so may result in the loss of valuable issues of "Amateur Radio." High costs of production make it necessary to limit the number of extra copies printed each month.

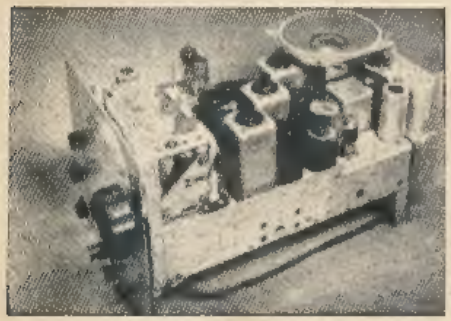
Tunable-I.F. Receiver using the BC453*

Up-Dated Surplus Receiver in an Inexpensive Assembly Meeting Modern Standards of Performance

CARL H. ERICSON, W2PPL

THE BC453 Command Set has enjoyed a long and varied career in Amateur Radio circles; its popularity is justly deserved. These units have been used as s.s.b. generators, panadaptors, the very famous Q5-er, and as parts of many receivers. The principal reasons why the 453 has found so much use are its small size, high gain and low cost, but perhaps the most valuable assets are the stable front-end and sharp intermediate-frequency system.

The presence of a 453 on the shelf here for many years has offered a constant challenge to see what could be done with it in the way of making an all-band Amateur receiver. There have been numerous articles on using a 453 as a tunable i.f. following a fixed-frequency front-end for 80 and 40,[1] but usually 7 Mc. was the recommended upper frequency because of image limitations with the 200 to 500 Kc. i.f. that was used.



The i.f. section of the 453 remains largely intact, with the new tubes in the rear-end section being installed on the afterdeck formerly occupied by the dynamotor mounts. The power supply is on a vertical sub-chassis at the rear, with the transformer mounted outboard to reduce internal heating.

Before starting this project some rough specifications were formulated, one being that the receiver should work on all bands except 10. Ten metres was not desired because of operating-time limitations. Additionally, the receiver should be small in size and self-contained—even including a small speaker for portable use; it should be stable enough for s.s.b. reception and also good on c.w. or a.m.; it should be sensitive and selective—in general, it should be a pretty decent performer.

These notes on the "HBR-453," if one may crib a name from Ted Crosby,[2] are an account of my experience in this endeavour.

Fig. 1 is a block diagram of the end result. The crystal-controlled front-end accounts for the fact that the stability

• These notes on the "HBR-453," as the author calls the receiver, are intended principally to suggest ideas, encourage experimentation, and inspire others to delve a bit into receiver construction. The set-up described here differs in many ways from previously-published schemes, and although you can take the circuit as a "final final" product for copying, the ARC5 receivers still offer plenty of scope for the ingenious builder.

of the HBR-453, on any band, is that inherent in the Command Set itself. Although no noise figures were taken, in this average location antenna noise greatly exceeds receiver noise on 15 metres. One band switch changes coils in the front-end. A separate switch is used for the crystals. Only the mixer circuit was broadbanded, since the antenna trimmer tunes the r.f. stage.

A 6BE6 was originally used as a converter but this was changed to a 6BE6-6AB4 combination at a later stage of development, to reduce mixer noise and to obtain more reliable oscillation with the higher-frequency crystals.

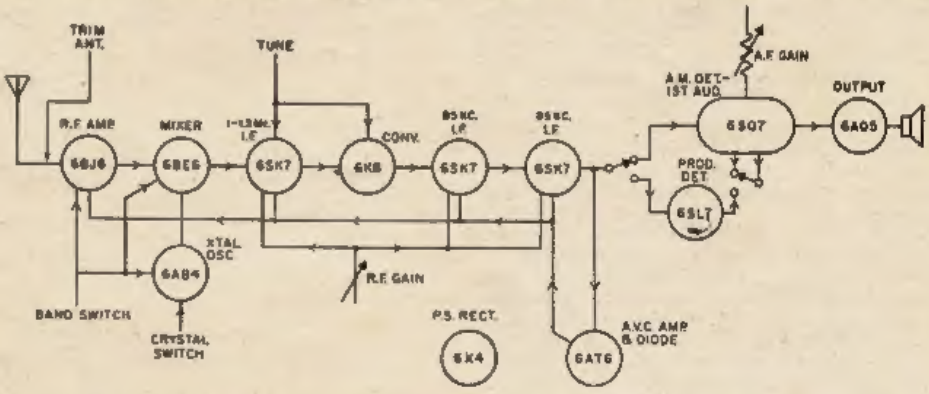


Fig. 1—Block diagram of the receiver. The 1-1.3-Mc. tunable i.f. is a revamped BC-453 receiver.

REVAMPING THE 453

TUNING RANGE

The front-end of the BC453, which is the tunable i.f., was the area in which most difficulty was encountered. Realising, from the experience of others with images, that the front-end had to be moved to a higher frequency, this was first attempted by pulling the slugs from the 453 coils. This increased the frequency not more than 200 Kc. on the high end and even less on the low end. Next, a set of Ferri-loopsticks was obtained and trimmed down for operation in the 1800-2100 Kc. range, a very nice place for the tunable i.f. so far as front-end images were concerned. This attempt failed because images in the tunable section, removed twice 85 Kc. from the desired signal, could not be brought down to a satisfactory level.

Finally the Rubicon was crossed and the coils that came with the 453 were gradually unwound and tried repeatedly until a balance between front-end images and internal images was reached in the vicinity of 1000 Kc. The tuning range was made 1000 to 1300 Kc. with the variable oscillator in the 453 being 85 Kc. lower in frequency (it was formerly higher in frequency than the received signal). This move to the low side of the signal was made in the interests of thermal stability, but it is possible that it contributed to some of the difficulty that was encountered later in tracking. The oscillator was not tried on the high side.

The final choice of frequencies resulted in image ratios in excess of 40 db., which is the limit of our ability to measure accurately; the ratio actually may be somewhat better than this. These measurements were taken with a transmitting antenna, tuned to the band in use, on the receiver; and that is certainly recommended operation for any station. In terms of actual listening tests 40 db. means that very few images will be heard, and those that do get through will be weak compared with the desired isgnal. (These are pre-inflation decibels, not to be confused with the type that come nowadays over 9 on the S meter.) All tests were made on 15 metres.

REAR-END CHANGES

The 85 Kc. i.f. strip of the 453 was used unchanged except for the a.v.c. and manual gain control circuits. However, beyond the second 6SK7 i.f. stage the 453 was completely re-built. Low audio gain made necessary the addition of a 6SQ7 first-audio stage, and a 6AQ5 was substituted for the original output tube to save room. The diode in the 6SQ7 was retained for a.m. detection and a 6SL7 was added as a dual-triode product detector. This circuit, used in some of the better commercial receiv-

* Reprinted from "QST," September 1959.

1 For example, Steward, "A Crystal-Controlled Plug-in Converter for the Q5-er," "QST," October 1949.

2 Crosby, "Ham-Band 14-Tube Double-Conversion Receiver," "QST," July 1957.

ers, gives very good performance on s.s.b. and c.w. The voltage available for a.v.c. with a diode alone at the second i.f. stage was insufficient to give the type of a.v.c. action desired, so the 6AT6 was added as an a.v.c. amplifier-rectifier. The amplifier is RC coupled, and as such gives plenty of gain at 85 Kc.

It was necessary to move the b.f.o. to the rear of the chassis to prevent stray coupling into the i.f. amplifier. Once it was moved to the rear the only precaution necessary was the use of a shielded lead to the product detector, and a tube shield. One half of a 12AT7 was used for the b.f.o.; the other half is currently unused but some day may see service as a 100 Kc. oscillator or the like. Since the 85 Kc. i.f's. will not pass both sidebands, it was necessary to switch sidebands by shifting the b.f.o. from 700 cycles above to 700 cycles below the 85 Kc. i.f. passband. The error this throws in the dial calibration is negligible.

Disguised by a new panel, and installed in a modified tuning-unit cover from a BC375, the BC453 which is the heart of this receiver is used as a tunable i.f. after a crystal-controlled four-band converter. The tuning range has been raised in frequency in order to reduce image response, and the rear end has been thoroughly revamped to modernise the performance.

POWER SUPPLY

A small transformer capable of delivering about 100 mA. at 230 volts powers the receiver. The RC filter, which also doubles as a voltage divider, renders the receiver completely hum free. Experiment showed that the 453 would perform well at plate voltages down to about 40 volts, but the gain rose rapidly up to 100 volts or so and then more slowly beyond that point. To keep down heating, and thus reduce drift, the 453 runs at 100 volts and the 6BJ6, 6BE6 and 6AQ5 are run at 180 volts for noise and distortion considerations. Voltage regulation wasn't required.

CONSTRUCTION POINTERS

It would be nice to be able to say that this receiver was put together over a week-end and it worked perfectly the first time, but that isn't so. It was put together over several months, and most of the time it didn't work well, if at all, until the end of the struggle drew near. This is not a step-by-step conversion piece, so anyone intending to construct a similar receiver should have some previous experience along these lines. Access to a signal generator, v.t.v.m., and a grid-dip meter is also desirable, and a circuit diagram for the BC453 is most essential. Aside from the foregoing we can only recommend a small measure of perseverance.

Numerous articles on the BC453 cover what one may expect to encounter upon digging into its vitals. These are recommended reading if one is not familiar with the unit. It was an easy piece of surplus to work on, as surplus goes. To get the 453 ready for conversion it was stripped of its top shields, antenna terminal, dial, and the mounts and socket for the dynamotor. The antenna trimmer capacitor, the rear socket and the front plug-in box were also removed. With the exception of the tube sockets, all of the receiver beyond the last i.f. transformer was removed, including the entire b.f.o. and all of the filament and high voltage filters. These filters are L14, L15, C32, C16 and C15 in the original circuit. R22 and R23 were left in to supply screen voltage. The neon bulbs were removed. A number of the capacitor cans along the side of the chassis were removed and replaced with small modern capacitors of the same electrical ratings. This was done only to gain some working space, and is a matter for the discretion of the builder.[3]

The filaments were rewired in parallel for six-volt tubes. The holes left by each of the four dynamotor mounts were enlarged to take sockets for the new tubes that were added to the rear end of the receiver, and the b.f.o. transformer was mounted in the socket hole in the middle of these four.

Although such an arrangement need not be copied, the new tube layout is as follows: The 6SQ7 goes into the 12SR7 socket, the 6SL7 into the 12A6 socket and, when viewed from the top front, the tube at the left rear is the 6AQ5, the one at the right rear is the 12AT7, and the one at the right front is the 6AT6.

A 2 inch sub-chassis was added to the bottom of the 453 in order to get more front panel space for controls. Although this receiver could have been made even smaller than it was, a future builder might do well to think in terms of a larger unit if greater ease in construction is to be desired. The front end was built on a separate sub-

[3] Another reason for the replacement of these capacitors is that most show signs of leakage with age.—Editor.

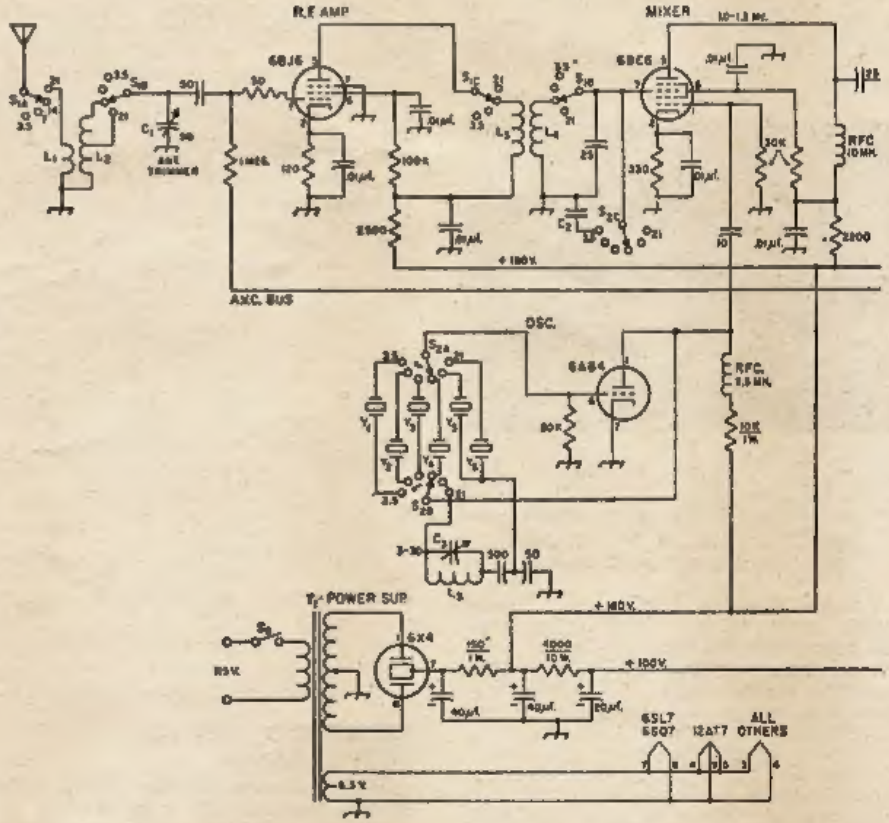


Fig. 2.—Circuit diagram of the receiver. The section shown on this page is built on sub-chassis as described in the text. Section on opposite page is on the BC453 chassis. Unless indicated otherwise, capacitances are in pF., resistances in ohms, resistors are ½ watt. Fixed capacitors of 0.01 μF. are disk ceramic; capacitors with polarity indicated are electrolytic; others may be mica or ceramic.

C1—50 pF. midget variable.
C2—5 pF. ceramic (see text).
C3, C4, C5—Mica trimmers.
L1 to L4 inclusive—See Table.
L5—7 turns No. 26 enamel, close wound on ¾ inch form.
L6—20 henry choke; any low current type is satisfactory.
LS1—Midget speaker, 3.2 ohm voice coil.
R1—0.5 megohm control, audio taper.
R2—3,000 ohm wire wound control, screwdriver adjustment.
S1—Phenolic rotary; 4 poles, 4 positions used, 2 sections.
S2—Ceramic rotary; 3 poles, 5 positions used, 3 sections.
S3—Rotary; 3 poles, 2 positions, 1 section.
S4, S5—Rotary, 1 pole, 2 positions.
S6—S.p.s.t., on R1.
T1—Power transformer, 230 volts each side c.t., 100 mA.; 6.3 volts, 5 amp.
T2—Output transformer, 7,000 ohms to 3.2 ohm voice coil.
Y1 to Y6 inclusive—See Table.

assembly; so also was the power supply, which hangs mainly on the rear panel. The power transformer was mounted on the outside of the rear panel to keep its heat out of the set.

An aluminium front panel was spaced ¼ inch off the front of the 453. A steel wire pointer, painted dull black, was fastened under the old dial nut, thus retaining the smooth dial drive that came with the Command set. The front of the 453 was painted with two coats of satin-finish white enamel and calibrated with India ink. Control nomenclature was lettered directly on the aluminium panel with a Leroy lettering set and India ink after the panel was etched with caustic. The final product was given two coats of clear lacquer.

453 CIRCUIT CHANGES

Work on the tunable portion of the 453 consists only of making it tune and track over the new tuning range. To facilitate work the common yoke between the coil cans was removed. This yoke grounds the shield cans, so once it is removed the cans have to be individually grounded. On the r.f. and mixer coils there was a ground pin available, but on the oscillator there was none so this can was grounded with a lug. The coils were altered by removing the following numbers of turns, in every instance from the hot end:

L1—110 turns.
L2— 50 „
L3—125 „
L4— 50 „
L5— 90 „

The slugs were used in the r.f. and mixer coils and were helpful in tracking. The slug was not used in the oscillator coil. Tracking accurate enough to produce a gain uniform to about two d.b. was as good as could be obtained. It is adequate. Fig. 3 shows the trimmer and padder capacitors added to the circuits.

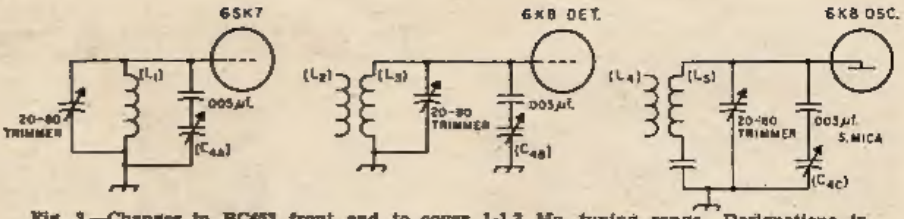


Fig. 3.—Changes in BC453 front end to cover 1-1.3 Mc. tuning range. Designations in parenthesis are the same as in the BC453 original circuit diagram. See text for data on changes in tuned circuit coils.

Fig. 4 shows the manual gain control circuit, which was in accordance with the original circuit diagram except that R12 was reconnected to include the second i.f. stage in the control. Before this was done the gain of the receiver couldn't be reduced sufficiently to monitor the home station transmitter.

Fig. 5 shows the changes made to incorporate a.v.c. in the 453 and to apply it to the 6BJ6. While on this subject of a.v.c. for c.w. and s.s.b., the discerning may note that this receiver has only 0.05 μF. on its a.v.c. bus, making it a fast-attack, fast-decay system. The writer has, in the past, modified a number of a.v.c. systems and built up more from scratch for use on s.s.b. No matter how one compromises their design, in my opinion they all still fall short in one respect or another. This a.v.c. is no worse than some of the "ultimate" systems I have tried.

The basic 453 seemed to be very noisy when the gain control was well advanced. This same characteristic has been observed in a few Q5-ers. The cause appears to be regeneration in the i.f. stages, which can easily be eliminated by installing decoupling networks consisting of 200 ohm resistors and 0.05 μF. capacitors at the screens of the 6SK7s. Once this was done the 85 Kc. i.f. strip couldn't be peaked up to the ringing selectivity it had displayed previously, so an inveterate c.w. man might not think this step desirable. The i.f. stages could be aligned to give something in the order of 1500 cycles at 6 db. down, which was a little too sharp for good phone reception, so they were slightly staggered to give a bandpass of about 2500 cycles. Switching of the transformers was tried in an effort to obtain variable bandpass, but it was found necessary to switch at least two transformers—four circuits— to get adequate control, so the idea was abandoned.

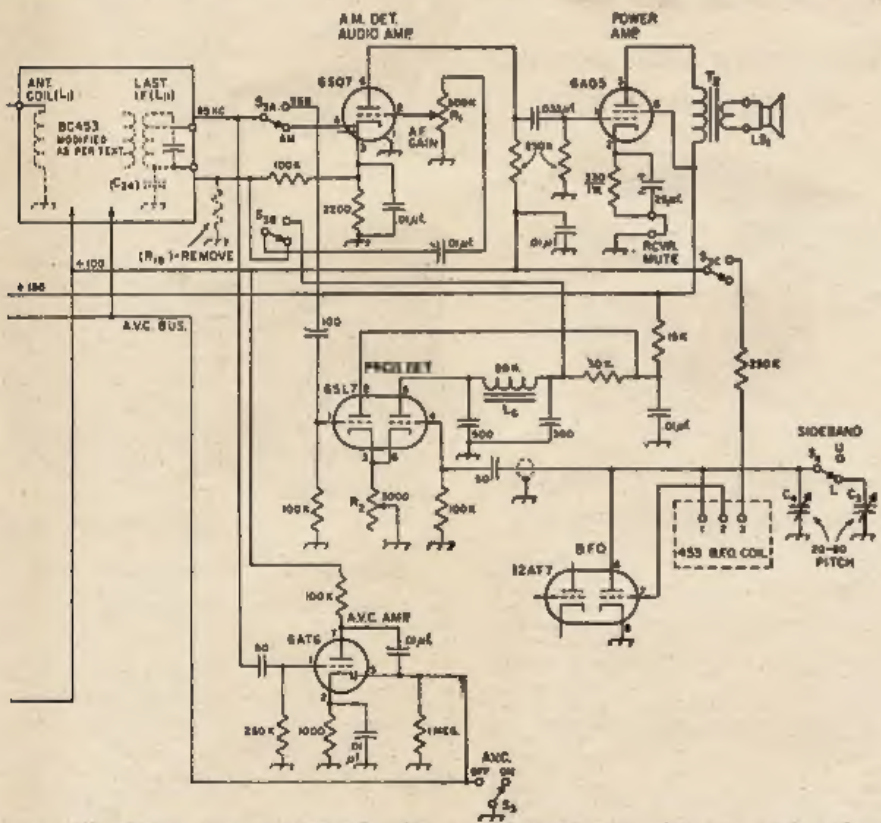
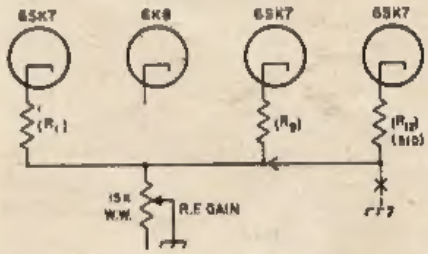


Fig. 5.—These changes in the BC453 add a manual gain control and apply it to the last i.f. stage in addition to the r.f. and first i.f. stages. Designations in parenthesis refer to original BC453 circuit diagram.



PRODUCT DETECTOR

The 6SL7 product detector was chosen because good results had previously been obtained with this circuit. This dual-triode demodulator gives about the same gain (loss) as the diode detector in the a.m. position, which is considerably better than some of the other circuits will do. The only adjustment required in the product detector was setting the cathode balancing resistor. This was set by switching to s.s.b. and pulling the b.f.o. tube out of its socket. The resistor was then adjusted while listening to an a.m. station. Over most of the range of this resistor the a.m. will be very readable but at one critical setting it will become so distorted as to be unreadable. That is the point. This point was found to hold unless the tube was changed for one of different characteristics, or unless the voltage on the tube changed by quite a large percentage.

On a.m. it was found that the 2500 cycle bandpass was inclined to make the signals sound quite bassy. On a stable signal this condition can be alleviated by switching to s.s.b. and using the b.f.o. as a substitute for the a.m. carrier. It did not seem prudent to widen the

The WARBURTON FRANKI Page

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HEATHKIT TX-1

"APACHE" HAM XMITTER KIT

Emphasising high quality, this rig operates with a 150 watt phone input and 180 watt c.w. input. In addition to c.w. and phone operation, built-in switch selected circuitry provides for single sideband transmission through the use of a plug-in external adaptor. A completely re-designed and stable v.f.o. provides low drift frequency control necessary for s.s.b. transmission. A slide-rule type illuminated rotating v.f.o. dial with full gear drive vernier tuning provides ample bandspread and precise frequency settings. The band switch allows quick selection of the Amateur bands on 80, 40, 20, 15 and 10 metres (11 metres with crystal control). This unit also has adjustable low-level speech clipping and a low distortion modulator stage employing two of the new 6CA7/EL34 tubes in push-pull class AB operation. Time sequency keying is provided for "chirpless" break-in c.w. operation. Final amplifier is completely shielded for greater t.v.i. protection and transmitter stability.

Price: £234 plus S.T.

★

HEATHKIT RX-1

"MOHAWK" HAM RECEIVER KIT

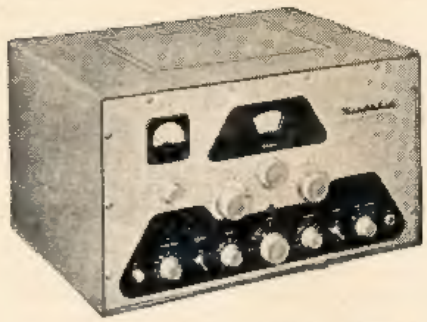
Enjoy Ham activities to their fullest with the Heathkit "Mohawk" Ham band receiver which has all the functions required in high quality communications for clear, rock-steady reception on all bands. This 15-tube receiver features double conversion with i.f.'s. at 1682 kc. and 50 kc. and covers all of the Amateur frequencies from 160 through 10 metres on seven bands with an extra band calibrated to cover 6 and 2 metres using a converter. Receiver accommodations are provided for these converters which will be available in Heathkits soon. The "Mohawk" is specially designed for single sideband reception with crystal controlled oscillators for upper and lower sideband selection. Completely pre-assembled, wired and aligned front-end coil assembly assures ease of construction and top performance of finished unit.

Price: £248 plus S.T.

HEATHKIT SB-10, SINGLE SIDEBAND ADAPTOR KIT

The many advantages of single sideband transmission will be of interest to Hams now operating strictly a.m. or c.w. S.s.b. requires less spectrum space, interference and fading are reduced, and signal strength is increased without greater power output. Designed as a compatible plug-in adaptor for the TX-1, it can also be used with transmitters similar to the DX-100 or DX-100B by making a few simple circuit modifications while still retaining the normal a.m. and c.w. functions. This modification will also be available soon in kit form. Extremely simple to operate and tune, the adaptor employs the phasing method for generating a single sideband signal, thus allowing operation entirely on fundamental frequencies. The critical audio phase shift network is supplied completely preassembled & wired in sealed plug-in unit.

Price: £85 plus S.T.



HEATHKIT DX-100B

TRANSMITTER KIT

The model DX-100B is a completely bandswitching rig for phone or c.w. operation on 160, 80, 40, 20, 15, 11 and 10 metres. It has a built-in v.f.o., or may be excited from crystals. Crystal sockets are built in. The easy-to-build kit contains all parts necessary for construction, including tubes, cabinet, hardware, etc. The detailed step-by-step instruction manual features plenty of pictorial diagrams for easy assembly. Pi network output coupling allows matching non-inductive loads from 50 to 600 ohms, and is only one of the design features of this outstanding performer. Assembly is subdivided into several stages. This allows the construction to proceed smoothly from one section of the transmitter to another. Sub-units are assembled and then added to the complete chassis. The chassis is extra strong 16 gauge copper-plated steel. Construction is further simplified by use of a pre-formed wiring harness, pre-formed coils, etc.

Price: £190 plus S.T.

★

HEATHKIT AR-3

ALL-BAND RECEIVER KIT

The Heathkit model AR-3 receiver features proven circuit design and physical layout. The net result is good sensitivity and selectivity, coupled with more flexible overall operation. Performance of the AR-3 is really outstanding, especially in view of its low kit price. High Q slug-tuned coils are used in the front-end and an antenna trimmer has been added so that the front-end may be peaked to a particular signal on any of the bands. The coil layout permits easy alignment from above the chassis. Predesigned oscillator coils result in increased conversion transconductance through the mixer circuit, and new-type i.f. transformers allow a better band pass curve, and more gain. The tuning capacitor is shock mounted, and the overall layout eliminates ground loops, shortens important lead lengths, and makes for easy assembly.

Price: £31/15/- plus S.T.

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i.f. just to make unstable signals sound better.

Quite a bit of 85 Kc. signal will go through the product detector and appear at the grid of the first audio stage unless it is filtered out. Filtering at 85 Kc. takes quite a large inductance to be effective as an r.f. choke, so it was decided instead to put in an audio filter using an iron-core inductance. By doing this, it was possible to start cutting off at about 3000 cycles and thereby eliminate some of the hash that adds nothing to communication.

The isolation of the b.f.o. was tested by switching to the a.m. position and powering the b.f.o. with a jumper. In addition to the shielded lead to the 6SN7 it was found necessary to shield the 12AT7 in order to remove all trace of beat signal.

At about this stage of the game one discovers he has a pretty hot broadcast receiver on his hands. In this metropolitan area, with powerful broadcast stations nearby, there was not a trace of these broadcast stations coming through after the receiver was installed in its shielded cabinet.

FRONT END

After the problems with the conversion of the 453 were licked, the front end went together quite uneventfully. Aside from running a metal shield between the input and output sections of the 6BJ6 circuit, no special precautions were taken; nevertheless, the stage proved stable from the start.

The addition of the 6AB4 was a big improvement and its omission would be discouraged. It may be noted that the oscillator switches from fundamental to overtone operation on 21 Mc. C3 is a 3-30 mica trimmer, and L5 is 7 turns of No. 24 on a ¼ inch diameter form. If it is desired to use an overtone crystal on 14 Mc. another coil-capacitor combination will be required and the coil should have about 10 turns.

The mixer grid circuits are peaked up for the centre of each band except in the case of the 80 metre coil. The 80 metre circuit is peaked at the centre of the 3.7-4 Mc. range with S2 on the proper contact for this range. Switching S2 to the 3.5-3.7 Mc,. range cuts in C2, which should be selected to peak the mixer at about 3600 Kc. without changing the position of the slug in L4.

PERFORMANCE—AND SOME SPECULATIONS

Now that the receiver is about completed one might logically ask if it meets the specifications. It is small, being 8 x 8 x 12 inches, and is very rugged. It contains power supply and speaker—although it is true that it sounds better on a larger speaker. Stability proved to be far in excess of expectations—possibly due to some fortunate circumstance—and certainly is a tribute to the design of the BC453. On 21 Mc., from a cold filament start, the drift has been measured at less than 300 cycles in the first 30 seconds, and less than 60 cycles from there on out.

COIL AND CRYSTAL DATA

3.5 Mc.:
- L1—30 turns No. 26 on ½" diam. form.
- L2—80 turns same as L1, wound close to L1.
- L3—90 turns No. 32 on ¼" diam. slug-tuned form.
- L4—120 turns same as L3, wound close to L3.
- Y1—4.8 Mc., for 3.5-3.8 Mc.
- Y2—5.0 Mc., for 3.7-4.0 Mc.

7 Mc.:
- L1—18 turns No. 26 on ½" diam. form.
- L2—45 turns same as L1, wound close to L1.
- L3—90 turns No. 32 on ¼" diam. slug-tuned form.
- L4—65 turns same as L3, wound close to L3.
- Y3—8.3 Mc.

14 Mc.:
- L1—5 turns No. 26 wound over L2.
- L2—18 turns No. 24, 32 turns per inch, ½" diam.
- L3—25 turns No. 32 on ¼" diam. slug-tuned form.
- L4—35 turns same as L3, wound close to L3.
- Y4—15.3 Mc.

21 Mc.:
- L1—Use L1 for 14 Mc.
- L2—Use tap at 13th turn from bottom on L2 for 14 Mc.
- L3—15 turns No. 26 on ¼" diam. slug-tuned form.
- L4—20 turns same as L3, wound close to L3.
- Y5—22.3 Mc., overtone type, for 21.0-21.3 Mc. range.
- Y6—22.5 Mc., overtone type, for 21.2-21.5 Mc. range.

Coils on ½" and ½" diameter forms are multi-layer (scramble-wound), approximately ½" in width; separation between coils wound on same form is about 1/16". Wire insulation is enamel. Adjust to resonate, with capacitances given in Fig. 2, to band for which wound.

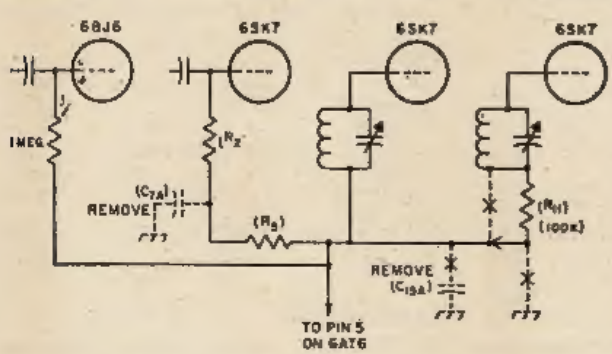
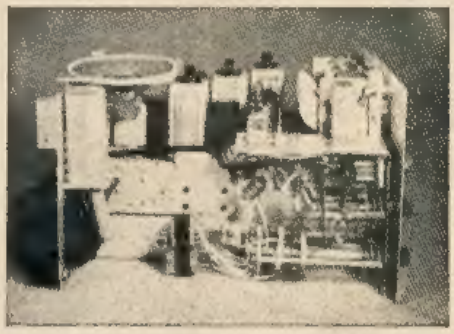


Fig. 5.—Circuit changes in the BC453 to introduce a.v.c. voltage from the added a.v.c. amplifier (6AT6). This drawing also shows the a.v.c. voltage applied to the 6BJ6 r.f. amplifier in the external converter.

The mechanical stability of the unit was implied earlier. I have repeatedly worked on the receiver while listening to an s.s.b. QSO and decided, say, to change a component in the audio circuit. The line cord would be pulled, the receiver up-ended and the part changed, then the cord plugged in again and the set returned to normal position—to find the s.s.b. QSO still in tune. The receiver is sensitive, has plenty of gain, and has a low noise level. The image rejection is a little poorer than was hoped for.

Having trod this ground once, would I come this way again? Probably not. If it is my "misfortune" to get another BC453 I think I would leave the 453 on 200 to 500 Kc., convert to 3500-3800 Kc. and 3700-4000 Kc. for 80, and convert to 3700-4000 Kc. for the higher bands, using triple conversion. Some preliminary tests made along this line indicate the need for an r.f. amplifier at the intermediate 3700-4000 frequency when working on the higher bands. Spurious responses should not be a problem except for one fifth harmonic that shows up at 21250 Kc., the injection frequency being 3.7-4 Mc. lower than the signal in every case.



The crystal-controlled converter is on a sub-chassis installed at the left front of the assembly. The three-deck switch at the bottom is for the converter oscillator crystals; the band switch for the r.f. and mixer tuned circuits is near the centre and the tubes are at the top. Power supply components are on the rear panel or sub-chassis.

One other idea that seems interesting is the use of a higher-frequency Command set, perhaps the one that tunes the 80 metre band. These units have the curse of a higher-frequency intermediate frequency amplifier that is quite broad, but they might respond to a cascaded half-lattice filter. In either case the tail end of the receiver described here would be pretty much duplicated. General coverage, rather than Amateur band only, tuning in the crystal converter section would be a worthwhile asset, in that it would allow any 300 Kc. segment of the entire spectrum to be covered by plugging in a suitable crystal.

A close inspection of the front panel will reveal a control marked noise limiter (NL). Since the type to be used has not been decided on as yet, that is just a provision for the future. Ah! Then the HBR-453 is not completely finished? No. and it never will be—not as long as new ideas continue to flash up on the horizon—wonderful ideas, that can be tried, incorporated or abandoned!

1959 VK-ZL DX CONTEST RESULTS

COMMENTS

First impressions suggested that poor DX conditions contributed largely to the small number of logs received in this year's VK-ZL DX Contest. However, upon perusal of some of the comments from overseas stations, it would appear that lack of support from VK and ZL stations was a major factor in the small number of entries received.

Since this Contest was inaugurated, as a VK-ZL Contest, in 1935, it has gained tremendous popularity among overseas countries and several of their prominent DX men claim it as the best contest of the year.

It would be a great pity to see this popular DX Contest lapse into the mediocre class for the want of support from the Amateurs of the sponsoring countries—VK and ZL.

Without going into a long involved "Pep Talk," the Contest Committee urges the DX men of VK and ZL to keep this Contest alive and show our overseas friends that we can put on a good show and support it with plenty of stations to work.

Unfortunately, the C.w. Section week-end clashed with a W.A.D.M. "behind the curtain" contest, resulting in severe QRM in the European area. This was most regrettable and calls for a closer investigation and co-ordination of contest dates on an I.A.R.U. level.

In the C.w. Section, last year's outright winner was VK2ADE by a narrow margin from ZL1AH, but this year, ZL1AH has topped his old rival by a comfortable margin with a score of 14,455 points. VK2ADE was second with 11,150 points, and ZL4GA with 10,755 narrowly defeating VK2GW (10,705 points) for third placing. Congratulations are extended to these stalwarts of the Contest for their magnificent scoring.

The winner of the Phone Section was VK5MS with a score of 8,050 points, all obtained on 14 Mc.! This effort deserves special commendation and congratulations.

In New Zealand the highest phone score was made by ZL1ACI with 4,675 points, again a fine single-band effort, made on 21 Mc.

The best scores from overseas stations in the C.w. Section were made by U.S.A. Amateurs. The leading stations were: W6GHM, 3095; W6IBD, 2,665; and W6KG, 2,340.

In the Phone Section, 9M2DQ takes the honors with a score of 1,285 points, followed by TI2OE, 1185, and K5MDX, 1,150 points.

It was encouraging to receive a good entry in the Receiving Section this year and our congratulations are extended to the outright winner, DX-37A, in New Zealand, with a score of 6,085 points, WIA-L5030 second with 4,770, and BERS195 with 2,975 points. Special congratulations go to the one YL entry, Miss O. J. Martin with a score of 1,585 points.

EXTRACTS FROM LOGS

BV1USB.—Was not able to operate as long as he wished, but enjoyed running up a score of 750 points.

ZS6IX.—Complains of high QRN level and poor conditions, but hopes to see us again next year under better conditions.

ST2AR, DL3LL, PA0LU and OH3TY all complain of QRM from W.A.D.M. Contest running on the same week-end as the C.w. Section. This, together with lack of VK-ZLs, made contacts hard to get.

DL1DX.—Our old friend, Hannes Bauer, ran up a tidy score of 1,200 points in the C.w. Section, but claims conditions were poor and feels that not very many VK-ZLs participated.

I1ER.—Made only one contact, with VK9XK, after many hours operating in the Contest. He quotes, "Very sorry, hi."

K2DGT.—Quotes, "It was a grand contest but sorry to hear so few of you boys on."

W2EQS.—Had troubles galore, keeping his transmitter on the air. Trouble developed in the h.t. power supply, resulting in a succession of 14 blown fuses. Nevertheless, enjoyed the Contest and ran up a score of 1,970 points. He wants to know where the VK1 Hams hide out during the Contest?

W6GHM (ex-SV0WP).—Quotes "Best contest of the year and wouldn't miss it." Incidentally, he was the only foreign entry to make contacts on 3.5 Mc. with two ZLs and one VK.

ZL4GA.—Suggests the overseas scoring be based on a similar pattern as our own bonus scoring system, thus giving added incentive to contact five stations, at least, in each VK-ZL district. This suggestion will be given due consideration for future contests but will have to be weighed against some adverse comments received about the continual changing of rules and scoring. More anon.

VK5MS.—Quotes, "Plenty of overseas stations on the air looking for contacts, but very few VK-ZL stations. Evidently publicity abroad very good."

Several other comments were received much in the same vein as the above. The general opinions are that the contest was very enjoyable with expressions of disappointment at the poor participation of our own VK and ZL stations.

The scores are as follows:

AUSTRALIA

C.W.—

Call	10	15	20	40	Total
VK2ADE*	2790	4140	2530	1635	11150
2GW	3240	2440	4105	920	10705
2HV			650		650
VK3DQ	1355	3230	3285	1845	9715
3CX			3860		3860
3YD				3745	3745
3JF			3520		3520
3PL			3115		3115
3ARX			1490		1490
3RJ			770		770
VK4TY	1735	1635	3035	55	6460
4SN	835	1490	495		2820
4SD			2395		2395
4SS			2350		2350
4DO		825	1235		2060
4JB			490		490
VK5BS	525	1155	2440	980	5100
5MY	455	920	3290		4665
VK7JB	1230	1815	4220	390	7655
7KA	1375	2310	1900	455	6040
VK9XK	2035	2755	1960	740	7490
9RO	2005	2335	720	395	5455
9NT	650	1465	2415		4530

* Total includes 55 points on 80 metres.

PHONE—

Call	10	15	20	40	Total
VK2AKV	55	1230	55		1340
VK3AEE			5960		5960
3BM		890	1790		2680
3OP			1595		1595
3AFF			345		345
VK4DO		850	330		1180
VK5MS			8050		8050
VK7WA			2385		2385
VK9NT	730	2575			3305
9RO	455	1640	255		2350

RECEIVING—

		Points
VK2	WIA-L2001	1990
	BERS-195	2975
VK3	WIA-L3074	495
	WIA-L3065	720
VK5	WIA-L5020	1575
	Miss O. J. Martin	1585
	WIA-L5030	4770
VK6	WIA-L6003	2525
VK9	WIA-L9004	1020

NEW ZEALAND

C.W.—

Call	10	15	20	40	Total
ZL1AH	3625	5130	4520	1180	14455
1MQ	2510	3550	2345	1390	9795
1AMM	1790	1585	3170		6545
1NG			5240		5240
1AFW	1060	2535	1605		5200
1TB			2180		2180
1MT†	155	110	1295		1615
ZL2GS	2255	1860	4820		8935
2AWJ		2130	2955	1835	6920
2AFZ			5340		5340
2IQ		610	655		1265
ZL3OB	1525	1090	3505		6120
3AB			2560		2560
ZL4GA†	345	2450	7190	715	10755
4CK			3250		3250

† Total includes 55 points on 80 metres.

PHONE—

Call	10	15	20	40	Total
ZL1ACI		4675			4675
1MQ	585	1590	1390		3565
1HA	260	1430	1275		2965
1PV		1140	140		1280
1AMM		165	1020		1185
ZL2AHZ	55	1440	1670		3165
ZL3OB		2725			2725
3AB			1955		1955

RECEIVING—

DX-37A ..... 6085 pts.

OVERSEAS

C.W.—

North and South America

Call	Pts.	Call	Pts.
CE3AG	1275	K5KBH	1945
CE3WZ	465	W5KC	1550
KZ5LC	510	K5UYF	595
PY1ADA	875	W6GHM	3095
PY4AO	835	W6IBD	2665
TI2CAH	995	W6KG	2340
VE3BWY	980	W6LDD	2295
W1JYH	960	W6NKR	1790
W1VG	950	W6ND	1265
W1WY	945	W6YVO	1240
W1KQF	775	W6IPH	1095
W1AWE	640	K6ICE	860
K1CUD	60	W6PHF	735
W2EQS	1970	W6ATO	655
K2DGT	1540	K8NLJ/7	290
K2UVU	730	W8BHW	2160
W2NHH	285	W8JIN	1785
W3DBX	1820	W8MCC	280
W3OCU	985	W8YPT	225
W3ARK	940	W8SPO	170
W4BJ	1805	W9WNV	1775
W4NPT	1575	W9SWR	530
W4FFF	725	W9KXK	480
K4UEE	575	W0YCR	1170

Europe

Call	Pts.	Call	Pts.
DJ2CM	640	OH3NJ	340
DL1KB	1495	OH7NW	340
DL1DX	1200	OH8OB	335
DL3BK	985	OH2LA	275
DL3LL	1470	OH7NF	230
DL6EN	1125	OH1TN	225
F8TM	220	OH4NI	55
G5RI	1380	OK1KLV	285
G6XN	1250	ON4FU	1105
G5HZ	990	ON4LX	935
G3WP	110	ON4QX	575
GI4RY	55	OZ6HS	120
GW3JI	915	OZ4RT	55
HA1KSA	530	PA0VO	580
HA5BI	170	PA0PN	575
I1ER	55	PA0VB	450
IT1AGA	60	PA0LU	380
LA5HE	420	SM5CCE	750
OE1ER	1170	SM5AJU	400
OH3TY	705	SM4AEQ	355

Europe (Continued)

SM5BPJ	175	TF3AB	115
SM6VY	165	UC2AR	110
SM3BIZ	110	UF6FB	55
SP6FZ	335	UR2BU	650

Asia

Call	Pts.	Call	Pts.
BV1USB	880	JA2JW	1415
JA1VX	2330	JA3JM	1830
JA1BKV	1750	JA5FQ	375
JA1AS	815	JA7XF	285
JA1BCP	420	JA7AD	115
JA1YL	340	JA8DS	60
JA1BQR	220	JA9JG	110
JA1ANP	175	JA0AC	585
JA1AYO	170	VS6BJ	395

Africa

Call	Pts.	Call	Pts.
FA8RJ	400	ZS6NE	1155
ST2AR	740	ZS6R	1085
VQ2CZ	715	ZS6IX	225

Oceania

Call	Pts.	Call	Pts.
KH6BXU	1850	KR6MG	570
KL7PIV/KH6	1040	VR1B	2140

PHONE—

North and South America

Call	Pts.	Call	Pts.
W2WZ	750	W5INL	345
K2OYN	285	W6LDD	650
W3DHM	665	KZ5LC	550
K5MDX	1150	TI2OE	1185
K5KBH	920	VE6IN	115
W5KC	490	XE1CP	755

Europe

Call	Pts.	Call	Pts.
DL3LL	990	OH5SM	795
DL7AD	585	OH2EW	350
EA3JE	750	OH3TY	340
EA3LI	360	OH2ER	175
EA7CP	315	OH4NI	55
EA2CK	290	ON4GM	530
G3FPQ	990	OZ4FA	540
G6XN	840	PA0MRN	110
G5HZ	635	PA0HIL	85
G3NMR	395	SM3BIZ	285

Europe (Continued)

SM3EP	190	CT1EY	645
SM4AEQ	125	CT1PK	245
SM5AIO	60	LA5HE	110
UR2BU	815		

Asia

Call	Pts.	Call	Pts.
HL9KJ	405	KR6QB	750
JA3JM	685	KR6RB	515
JA1BQR	415	9M2DQ	1285
JA1AS	55		

Africa

Call	Pts.	Call	Pts.
ZS6UR	295	VQ3GL	120

Oceania

Call	Pts.
KH6BXU	640

RECEIVING—

America

K2-7079	675	Points
W5-R. Harris	225	"

Europe

BRS15822	1455	Points
BRS6604	935	"
SP9-1022	865	"
SM5-2735	685	"
HE9-RAP	690	"
HE9-EVI	410	"
HE9-EWB	395	"
DL-8497	220	"
HE9-EZG	55	"
HE9-FAY	55	"
SM4-2825	Ineligible	
PA0-37/MM	"	
YO2-476	"	

Asia

JA6-1270	1275	Points
JA1-1578	1145	"
JA5-1094	790	"
HL-5001	575	"
JA1-1716	365	"
JA6-1322	Ineligible	

Results of Geneva 1959 I.T.U. Conference

JOHN MOYLE, VK2JU

AS you know, I had planned to write this story in the fullest possible detail, and to report in person to every Division of the Institute on my return from Geneva. It is therefore a bitter disappointment to find that my health is not good enough to do this. However, I have already had several long talks with the Federal President, Max Hull, who now has a large quantity of Conference documents, including verbatim accounts of many important meetings, from which the case history of every Amateur band can be assembled for future reference.

This general survey will, I hope, assist the Amateurs of Australia to obtain a quick picture of what happened, and what I think we must do to get ready for the future.

Geneva 1959 is now only a memory. For better or for worse, the radio scene for the next few years has been redefined, and the final agreement signed on December 21. The full document is now being printed and should be available for distribution quite soon.

Its pages of tables and regulations will clearly reveal how much work went into their preparation, but can tell nothing of the drama, the dangers, the tension, and the hours of frustration and achievement through which we lived during the long weeks of the conference.

MOMENTOUS CONFERENCE

Without doubt this was the most momentous conference of them all, one which grappled with the virtually insoluble problems and mistakes of the past, and attempted to deal with even more sweeping demand which we know the future will bring.

I only wish every Amateur could have been present at least part of the time. He would have learned about the enormous pressures on frequency space which have literally made portions of the spectrum unworkable; he would have seen how Amateur problems, important though they are to us, are only a small part of the incredibly complicated pattern of modern communication.

He would have seen, too, the stubborn and altogether admirable fight put up by all those interested in Amateur Radio in the face of this opposition, a fight in which every band has been retained, in most cases intact, and a final result obtained appreciably better than most of us hoped for.

I have already told you of the enormous dimensions of the conference, with its 1,000 odd delegates, committees to the tune of about 100, and millions of foolscap sheets which made up the daily working documents. I have also outlined the committee and working group structure by which the mass of proposals was processed and decided upon.

The Batiment Electoral, Geneva, location of the I.T.U. Conference.

Alex Reid, VE2BE (left), A.R.R.L. Director for Canada, chatting to John Clarricoats, G6CL (right)

My stay at the conference was from the commencement on August 17 until November 19, the longest stay of any purely Amateur delegate with the exception of A. L. Budlong, General Manager of the A.R.R.L., who remained for a week or two after I left. By the time I caught the plane for home, all our problems had been dealt with, and were being confirmed at the Plenary level.

Some minor changes took place here, all in our favor, and all the result of ground-work already done.

AMATEURS RECEIVED AN EXCELLENT HEARING

Firstly, let me say that the Amateurs received an excellent hearing at every level of the conference and a very fair hearing at that. Even where criticism and opposition were hottest, every point was fully debated and fully considered. Many long and important meetings were devoted to nothing else, particularly the series of Committee 4 wrangles about the 7 Mc. band and its impact on broadcasting. Many powerful and even impassioned speeches were made in their defence, and I for one could not have wished for better treatment of our case.

Secondly, the quality and quantity of Amateur representation was better at Geneva than at any previous conference. Apart from myself, A. L. Budlong and John Huntoon of the A.R.R.L., were attached to the U.S. delegation as Amateur representatives, and Len Newnham for some weeks to the U.K. delegation. There were also five I.A.R.U. representatives from Region I. countries, led by John Clarricoats (G6CL), who were present from time to time, and they did some useful work, particularly in sorting out some of the problems peculiar to that Region.

But best of all there were capable delegates from many countries such as U.K., U.S.A., New Zealand, Argentine, Canada, Brazil, South Africa and some others who, being the actual spokesmen at meetings, fired the real bullets when the debates began.

Naturally we got together on every possible occasion to discuss the position and this team work was quite a vital factor in getting things done.

In these circumstances, the importance of a Region III. representative being present cannot be over-emphasised.

BAND ALLOCATIONS

At this stage it might be appropriate to run through the bands to see how we fared. I'm afraid this will involve some duplication of earlier reports, but I will give the picture in general without including all the odd footnotes involved. Later on, when the Geneva Regulations are available, no doubt "Amateur Radio" will print extracts from the tables in full.

To help matters, I can say that in Region II., there were no changes of any importance to the old band alloca-

tions. This was due undoubtedly to the preliminary work carried out by the U.S.A. in lining up all the countries in North and South America so that any disagreements existing between them would not appear in the tables.

By their numbers, organisation, excellent Laison with the F.C.C. and commercial friends, the American Amateurs exert a powerful influence, so much so that their delegation was persuaded to flatly oppose each and every proposition to change the status quo, and to be supported almost universally in Region II. This solidarity overflowed to the advantage of Amateurs in both Regions I. and III., and to me **was an object lesson in how to organise.**

I shall not, therefore, mention Region II. in what follows.

1.8-2 Mc.

There was no problem here from our point of view. The status quo remains, and we share with Fixed, Mobile and Radionavigation. The P.M.G. has not given us a general allocation here, but in view of our other losses, maybe we can persuade them to find a suitable spot.

In Region I. there was a fine old discussion for and against Amateur operation, some Europeans being bitterly opposed, while others who had not previously allowed Amateurs now wished to include them. U.K. was a strong supporter here. Finally, a maximum section of 200 Kc., with a power of 10 watts, was allowed by footnote in Austria, Czechoslavakia, Denmark, Finland, Ireland, Netherlands, Germany, Rhodesia and Nyasaland, United Kingdom, Switzerland, South Africa and South West Africa. European countries must co-operate to avoid interference with other services.

3.5-3.9 Mc.

This band is allocated generally to Region III., shared with Fixed and Mobile, but by footnote Australia has restricted Amateurs to 3.5-3.7 Mc. exclusive, the remainder being given to the other services. India has an even more drastic footnote limiting Amateurs to 3.89-3.9 Mc. From our viewpoint, this limitation comes from the P.M.G. and is in line with Australia's original proposal. Frankly, I find difficulty in appreciating the need for this footnote, because being a shared band, local administrations have authority to split it up in any way they choose, without further reference to the frequency table. In fact they have already done so.

But appearance in the table means that they cannot reduce our band any further

Some Amateurs present at I.T.U. Conference. Left to right Steve Chisholm, VE3ATU, John Moyle, VK2JU, John Huntoon, W1LVQ, John Clarricoats, G6CL, Wayne Green, W2NSD, Don Vaughan, ZL2VA, Arthur Milne, G2MI; and Adolf Dominkus, OE1AD.

7.1-7.3 Mc.

Regions I. and III. have lost the use of the shared portion between 7.1 and 7.15 Mc., which becomes exclusively broadcast. **But there is a rider that broadcast stations must vacate the exclusive Amateur portion between 7 and 7.1 Mc.** Frankly this isn't worth much, because several countries now poaching there announced quite openly that they won't move until given clear channels, of which there are none.

To test the practicability of this rider, the Americans proposed that Amateurs should continue with the present allocation until the International Frequency Regulations Board (I.F.R.B.) declared that the poachers had moved out. After a vigorous debate, the proposal was defeated by only two votes.

Australia was the only English speaking country which voted against it.

But in all fairness, it wouldn't have done much good if carried, for the determination of countries such as Pakistan to stay put would have merely meant reversion indefinitely to the status quo.

And as so many countries have obviously been told to get that 50 Kc. or else, they were happy to go along with the pious hope of clearing the Amateur band, but were not prepared to wait until the hope became reality.

As I have already said, the standard and bitterness of the debates on this matter, the special committees set up to handle it, and the good old duck-shoving that went on, convinced me that high political hands were at work, far beyond any capabilities of mine to influence.

The relative documents even refer to the undesirability of Amateurs sharing bands with broadcasting, which put the death-blow to my initial efforts to get daylight sharing.

But our case for the latter is so good that I for one wouldn't stop trying.

A hard pill to swallow was the general agreement on an engineering level that bad band management, jamming, and duplicated services were largely to blame for the congestion on the broadcast bands. Unfortunately, national prestige is so wrapped up in having mighty voices on the air (and who listens?) that even the smallest and newest countries are spending more than they can afford to join the chorus. No one will give way, and so the mess continues.

The Amateur hadn't got a chance except in Region II. where broadcast demands apparently are more modest.

Incidentally, the leader of the New Zealand Delegation made a particularly good speech in defence of this band in which he paid a glowing tribute to the value of his own and other Amateurs and their work for the community. It was a highlight of the discussion.

14-14.350 Mc.

The thing which saved this band was the refusal of the U.S.A. to agree to any curtailment. Both the fixed services and broadcasting would have liked a slice of it, and both made moves to get it.

But both were prevented from coming into an open meeting where they might have gained some support, and perhaps secured some regional arrangements, however impractical.

I was, therefore, particularly pleased that Australia was persuaded not to press her proposal to cut the band by 100 Kc.

This left India's even more drastic proposal to cut 150 Kc. off the high end for broadcasting out on a limb, and it got no further.

But fundamentally, no one was enthusiastic about pushing a lone hand against powerful American Amateurs who are audible somewhere or other all around the clock.

And while this position remains, I don't think they ever will.

21-21.45 and 26.96-27.23 Mc.

The 21 Mc band was conned from many angles and quite a few suggestions were made for slicing it for various reasons, but none of them made the grade. When I left Geneva there was still a suggestion, unsettled, to allocate 5 Kc. at 21 Mc. for space research, but apparently it was abandoned for I see no mention of it in latest advice. So this band continues unaltered.

The 27 Mc. band is available in Regions I. and III., shared with industrial, scientific and medical services, and we can use it if we wish.

28-29.7 Mc.

This was a most hotly contested band. At least three special group meetings were devoted to fighting off proposals from the meteorological aid people, who wanted half a megacycle for their old-fashioned radio-sondes, and from France and Japan, in particular, who wanted slices in which to operate fixed and mobile services. To me our success here was the best example of organised Amateur resistance, in which our own Australian delegation played no small part.

When I left Geneva, the met. aids had been successfully countered, but there were two proposed footnotes to allow fixed and mobiles in Europe and Japan to use part of the high end.

Apparently the battle against these was joined once more in the Plenary session, for the footnotes do not appear in the table, as I have it now, and the band is therefore unchanged.

It is probable that fixed and mobile services will operate under Section 88 of the Regulations, which means that they do so at their own insistence and without any protection against interference, particularly as I think Japan has been operating with low power for river boats for some time. They are not likely to be a serious worry to us.

56-58 and 146-150 Mc.

These bands have been re-aligned in Australia to fit in with our t.v. assignments, and two megacycles have been taken from the lower band. This is unfortunate, but as we have never used the full four megacycles in the past, it is not surprising that the authorities should think we didn't need it. Should it be decided not to proceed with the suggested Band 1 for t.v., it could be

that we would get our old 50-54 Mc. assignment back again, which would be fine. At the moment we can only hope.

As both bands are out of step with world-wide assignments, they are covered by special footnotes to the table.

420-450 Mc.

This has been a shared band for Amateurs although we have never had a firm allocation. Our original proposals omitted Amateur altogether, and one of my tasks was to remedy this if I could.

This was eventually made possible because of the introduction of a new Radiolocation type of service, the sponsors of which had no objection to sharing with Amateurs when the service itself should be established.

This band now is fully occupied with Fixed and Aeronautical services, but in the next few years changes are likely to occur which could make it possible for us to use it. At any rate, we are back in the table, and some day we might well be very glad that we are.

1215-1300, 2300-2450, 3300-3500, 5650-5850, 10,000-10,500, 21,000-22,000 Mc.

These bands follow the general pattern of the highest frequencies in the table, except that they have been extended beyond the old limits and are all annotated as shared with Radiolocation in Region III. In all cases, the latter has priority.

The band 3300-3500 Mc. is another from which Amateurs in Australia had originally been excluded, but it was found possible to change thinking on this point.

MORSE CODE

A point of interest is that the lower frequency limit for which the Morse Code is required has been raised to 144 Mc. Australia had proposed this to be 50 Mc., and was supported by Argentine. Both the U.K. and U.S.A. initially opposed this and just before I left Geneva had compromised at 250 Mc., (not a very practical figure) and no arguments of mine could shift them However, they must have had second thoughts, for at a subsequent Plenary meeting, they agreed to 144 Mc.

Our delegate fought hard on this proposal, but in any case it will not be allowed to affect the terms of our limited licence. It just brings the figures so much closer.

LESSONS LEARNED

Geneva taught me several new lessons and underlined many old ones.

Fundamentally, these conferences are meetings of national delegations, each of which has a vote. It follows, therefore, that the first aim is to convince each delegation that the claims of the Amateurs are as strong as those for any other service and thus to secure votes for them.

It is far too late to initiate action at the conference itself, by which time most decisions have been made up to this level.

It follows, too, that the Amateurs should work on a long-term basis to establish good will and a high priority at home, and on a short-term basis to see that they always have a representative as a member of the delegation to press home the Amateur position and improve it if he can.

A team of such Amateur representatives can wield a powerful influence, even if it does not include a member from every country, which would be too much to ask.

We fell down because our preliminary work over the years was not good enough, and we were obliged to take drastic action at a late hour. It is true that the inexplicable attitude of the P.M.G. in several matters did not help, but the fact remains that the members of F.A.S.C., who prepared our brief, did not understand the Amateur position, and were thus unduly influenced by the P.M.G. representatives and their assessment of our proposals.

At Geneva I am quite sure that I managed to effect a big change in this, and ultimately found our delegates most helpful in all matters which did not contradict the Australian brief.

Delegates in attendance at the Plenary Session

Many of them did good work for us in defending our bands when they were under attack.

Had this attitude prevailed during the initial F.A.S.C. meetings, we may have started out more favorably.

The countries which really carried the fight for Amateurs were those such as the U.K. and U.S.A. in which Amateur organisation is well developed and relations with the authorities and others are good.

In countries where ordinarily the reverse is the case, dangerous weak spots were apparent.

I.A.R.U. Ineffective Body

The I.A.R.U. is not a very effective body at such a conference.

In the first place, there is no national co-operation except in Region I., in which the R.S.G.B. is the dominant society. In Region II., the prestige and influence of the A.R.R.L. renders it unnecessary, and in any case the A.R.R.L. officers (also federal officers of the I.A.R.U.) cannot perform both jobs at the conference. Region III. is so dispersed that no real I.A.R.U. representation is practicable.

It is frequently helpful to have an I.A.R.U. representative who can speak more freely than an Amateur attached to a delegation, but in the present circumstances it is only natural that the I.A.R.U representatives, all from Region I., are strongly pre-occupied with their own problems. It is hard to visualise any practical method by which the I.A.R.U. could finance and support a really representative organisation covering the world.

Nevertheless, the I.A.R.U. team worked hard and I do not mean to belittle their efforts by these general comments.

Our Own Outlook

Closer to home, we have two major reforms to make.

Firstly, we must obtain a much greater sense of Federal responsibility from the ordinary Amateur and from the Divisions. At the moment, this sense is at its lowest ebb and has been for years.

Coming straight from Geneva, where our very future was being battled for, I was astounded and discouraged to find that Divisions had voted against holding a Convention this year. At the very time when our future and past organisation is of primary importance, the Federal Council was not to meet, apparently because it couldn't think of anything important enough to discuss.

We must find Councillors and Divisional leaders who have much wider

(Continued on Page 15)

N.S.W. 10th Annual Convention at Dural, 30/1/60

OUTSTANDING SUCCESS OF NEW FORMULA

"HELLO, hello, pleased to meet you at last old chap, golly I never thought you looked quite like this, but never mind, all the times we have talked on the air we have really had such fine contacts that we are darned glad you came along. Where are the family?" "In the car." "Well come along to the registration booth and get fixed. Yes, only a reasonable charge for each adult and the kiddies under 16 are on the house. One of our team of associates will register you and the wife, and don't forget to pick up your A.W.V. folder containing all sorts of technical information and an azimuthal map for your beam. Now you have registered, old chap, just park the car, the parking marshal, yes, the fellow with the arm band, will position your car for you, so that it is safe and can be removed easily at any time. OK? See you when you get set and I will take you round the show."

This, fellows, was the formula of the 10th Annual Convention, held at Quarry Road, Dural, the home of VK2WI, on 30th January, 1960, when the N.S.W. Divisional Council played host to the many country and city members who attend these functions each year. (Certainly, come along next year, but first see what you missed.)

Well, we went along with our new-found friend and proudly showed him the many attractions which had been organised for the great day, organised over some months with the fellows who so generously gave their time and gear to illustrate the growing scope of our hobby, AMATEUR RADIO

We went along first to the display of old timers' equipment, which was capably arranged by our old friend, Joe Reed, VK2JR, assisted by our foundation member, Wal Hannon, VK2AXH, and saw among the neatly arranged and adequately ticketed collection, gear with which we used to play in the years gone by, and I must confess some which we had never seen, sheer nostalgia on this stand of Joe's.

Passing on and meeting many old and new acquaintances en route, we reached a new exhibit, that of Transistory, under the organisation of Harold Burtoft, VK2AAH, assisted by Muriel Eagles, VK2AIA, one of our few ladies of the air waves. Much interest was displayed in this collection of gear and it showed that the days of the large piece of equipment referred to as a receiver may be on the way out. Harold had small transmitters, a few inches square, powered by a few dry cells; a communication receiver in three small sections, similarly powered; a t.r.f. receiver on the broadcast band which was doing its best to get above the noise of the fair, and doing it well. One fine display on this stand was the exhibit of many types of transistors, silicon rectifiers and diodes which was made available by Mullard (Aust.) Ltd., and which will be instrumental in many of our group appreciating the value of semi-conductors as a whole.

Next in line was the mobile exhibit, consisting of cars owned by 2AAH, 2AI and Jim 2PM, illustrating the manner in which mobile equipment can be installed in any type of car.

Renewing more acquaintances we went over to the s.s.b. tent, where we received a good grounding on the merits of s.s.b. by Leo McMahon, VK2AC, with his cohorts Stan Bourke, VK2EL, Don Pollard, VK2ASW, and Barry White, VK2AAB, ever ready to spread the s.s.b. gospel, and many converts will be at the ready with iron and side cutters to convert that piece of gear which has been awaiting its owner getting the dope straight from the horse's mouth, so to speak. A number of countries were worked on this home-constructed gear and despite conditions being quite poor, the signals just appeared to pour in and working these stations appeared easy.

As we approached the large crowd around the shed, which, incidentally, contains the emergency power plant which later on supplied some 12 kw. of power for the auxiliary outside lighting, we had no delusions that a disposals sale was in progress. Several perspiring gentlemen were dispensing the gear; Harry Solomon, VK2AJZ, and Noel Hanson, VK2AHH, and others were assisting the leader of the team, Alan Williams, VK2PH, who for many hours were kept busy by an ever increasing crowd.

Moving on again, we visited the display organised by John Larke, VK2ZAV, and his team of the V.h.f. and T.v. Group, this one of further interest to the country fellow who rarely sees the other fellow's gear at all, and the boys in charge were of course at the ready to answer all queries. The antenna in use here was a novel innovation, a 60 ft. collapsible tower and beam mounted on a small truck

By this time the afternoon was passing, the crowd rapidly increasing, and a visit was paid to the Secretary's tent where Norm Beard, VK2ALJ, was in attendance to answer all requests. With Norm was the QSL Bureau with the QSL officer, Frank Hine, VK2QL, officiating, dispensing DX cards to all and sundry, and in his spare time attending to the water boilers and generally assisting the ladies who were so busy preparing the afternoon tea.

THE Official Opening of the Convention was performed by the Divisional President, Dave Duff, VK2EO, who presented the Councillors present —Ted Whiting, VK2ACD; George Rutter, VK2CB; Max Pleffer, VK2MP— and also presented the President of the Hunter Branch, Lionel Swain, VK2CS; Wal Hannon, VK2AXH; Bill Otty, VK2ZL, and others.

Activity was noticed at the side of the building, it was the Blindfold Transmitter Hunt, conducted by the Blue Mountains Section, and attracted a lot of interest by all present. Sections and heats were run off all afternoon in the ladies, gents, boys, and girls' classes.

Afternoon tea was served in the rest area by the catering committee, consisting of Mrs. J. Duff, Mrs. M. Stahl, Mrs. A. Whiting and daughters.

Following a further inspection of the gear on show, the keg show was opened under the direction of one of our country members, Ken Scott, VK2XS, and assisted in a most experienced manner by Sid Molen, VK2SG; Ern Marstella, VK2AEZ; and Ken Ledrum, VK2ST, and last but not least by the custodian of the Garden of Eden, Col Fletcher, VK2ASF. Reminiscences were related by many over a glass of cheer and eventually it was announced that the 80s had been successfully de-modulated to the satisfaction of all. During the tea interval, when more tea was available, and drinks for the kiddies dispensed, all over the grounds were groups gathered around their cars attacking the contents of the baskets of eats Mum had brought along.

The evening show commenced at 8 p.m. and was in the form of a mammoth quiz with mammoth prizes. Participants were selected by ballot and were questioned by the compere, Max Pleffer, VK2MP, resplendent in white tuxedo and black pants. The questions were many and varied, and consisted of the information which every Amateur should know, gleaned from such sources as "Amateur Radio," Handbook for Operators, A.R.R.L. Handbook and Radiotron Designer's Handbook. Much merriment accompanied many of the answers and finally the two finalists, Bill Shakespeare, VK2AGF, and Lindsay Douglas, VK2ON, faced the final round. It is now history of course that Lindsay ran out the winner by one point over his opponent. Prizes were presented during proceedings by Bill Moore, VK2HZ; Bob Bensley, VK2XP; and Dave Duff, VK2EO, to the fortunate recipients who were as follows:

(Continued on Page 15)

OPENING CEREMONY
Left to right: 2ZL, 2CS, 2ACD, 2MP, 2AXH, 2QL, 2CB, 2ALJ, 2EO (Pres.)

VIEW OF CONVENTION IN GROUNDS OF VK2WI, DURAL.

RESULTS OF GENEVA 1959 I.T.U. CONFERENCE

(Continued from Page 13)

vision than this. All our excellent, and often elaborate, Divisional set-ups will be of little use if we haven't the bands to use them.

Secondly, we must evolve a Federal set-up which will work, which will attract Councillors of high standing and experience who can tackle the job of improving our own standing and priority in the communications world.

At present the Federal Council isn't doing its job, and the Federal Executive has become exhausted trying to cope with an almost impossible situation.

I am not intending here to supply a set of answers to this matter, which is an ideal item for a Convention if ever there was one. But I do say that unless we are prepared to solve the problem, and to spend money doing it, we can't blame F.A.S.C. or anyone else if they overlook Amateur claims because we are inadequately organised to handle them.

To my mind it is an urgent and critical situation.

I must conclude my report at this point. I suppose we must always regard a conference involving losses as a failure, but I believe that, in the circumstances, we have a great deal to be thankful for. At least I did the best I could to help bring this about. **I believe that every Amateur who tacks his licence to the wall must shoulder an inescapable responsibility to his fellow Amateurs and to the Amateurs of the future. If he fails them, they must suffer and may even cease to be.** Please think about this, for it is the key to everything that I have written here.

N.S.W. 10th ANNUAL CONVENTION AT DURAL

(Continued from Page 14)

Quiz champion, Lindsay VK2ON, who received an H.M.V. Little Nipper Radio; Quiz runner-up, Bill VK2AGF (Sunbeam Frypan); quiz 2nd round, Stewart VK2ZDF and Noel VK2AHH each received a DG7-5 c.r.o. tube by courtesy of Mullard Ltd. The other participants in the quiz each received prizes of tubes donated by various firms. Lucky gent's number, Mr Conrad, Hecla Kettle; lucky lady, Mrs. A. Hart, XYL of VK2HO; most distant member within VK2, Mr Murrell, Hillston, an AR7 receiver; most distant lady within VK2, Mrs. I. McKosker, table lamp; most distant visitor, VK3AVK, AR17; and 2nd most distant lady, Mrs. C. Fletcher, XYL of VK2ASF, bed lamp; blindfold tx hunt prizes: gents, Peter VK2JX, VK2ZGW; ladies, Mrs. I. Kinscher, XYL of VK2ADL, Mrs. P. Adams, XYL of VK2JX, boys, Peter Agar, Stephen Adams; girls, Judith Johnson and Victoria Stewart.

The thanks of Council were expressed by the Chairman of the Organising Committee, Ted Whiting, VK2ACD, to all those who toiled so hard to make the function the outstanding success it was and also tributes were made to E.M.I Ltd., Martin de Launay Ltd., Mullard Aust. Ltd., A.E.I. Ltd., Lawrence and Hanson Ltd., A.W.V Ltd., U.R.D. Ltd., and Idwal Jenkins Pty. Ltd. for their generosity in providing such an excellent prize list for the occasion.

Dave Duff VK2EO, in closing, passed [illegible] to all the 409 who attended this Tenth Annual Convention occurring in our Jubilee Year, and invited all members and their families and friends to the next Convention in 1961.

Registrations: VKs 2AVK, 2XS, 2XP, 2ARC, 2SG, 2EO, 2AXH, 2AEZ, 2NK, 2XX, 2AGF, 2MP, 2AFB, 2ASF, 2DO, 2ACO, 2AEY, 2AZW, 2MZ, 2JR, 2CB, 2ACD, 2ALJ, 2TQ, 2ANY, 2ADL, 2ANC 2FM, 2ST, 2OQ, 2QA, 2HZ, 2AI, 2ON, 2XT, 2FP, 2VB, 2ASQ, 2AZG, 2AKB, 2AX1, 2RM, 2AVK, 2AIA, 2AAH, 2DE, 2DM, 2YU, 2ALY, 2MU, 2ASV, 2VA, 2JX, 2ET, 2AAB, 2AWZ, 2AC, 2ATZ, 2AXK, 2SP, 2UJ, 2VM, 2ANN 2SF, 2CS 2ABZ, 2ADF, 2AHR, 2HP, 2AAJ, 2ZA, 2YB, 2LS, 2ACR, 2AFA, 2AKX, 2ZL, 2AIM, 2AZE, 2GE, 2AIX, 2ASW, 2PY, 2BP, 2ABP, 2ALV, 2AYL, 2RJ, 2BQ, 2WE, 2EK, 2EI 2ZO 2AAW 2ACP, 2AVK, 2VN, 2XQ, 2TW, 2APU, 2PZ, 2AIY, 2AST, 2AVW, 2WJ, 2IK, 2ACK, 2ABB, 2ACQ, 2ABM, 2AAT, 2AHH, 2AOQ, 2SW, 2AEE, 2AKE, 2AJQ, 2YR, 2RU, 2PI, 2VL, 2APQ 2FY, 2AT, 2VJ, 2SA, 2OT, 2HO, 2ASZ, 2NT, 2FJ, 2AQR, 2AQY, 2AIC, 2AMA, 2OL, 2VH, 2OA, 2FH, 2ZCS, 2ZFW, 2ZGW, 1ZDM, 2ZBX, 2ZAR, 2ZCM, 2ZPG, 2ZTM, 2ZBB, 2ZEF, 2ZDF, 2ZNM, 2ZCL, 2ZCF, 2ZJC, 2ZKO, 2ZLS, 2ZHW, 2ZUL, 2ZEW, 2ZAF, 2ZLH, 2ZMB, 2ZDK, 2ZCW, 2ZPC, 1ZCA; Associates 75, XYLs 46, and juniors 130.

ANNOUNCEMENTS

The South Western Zone of the Victorian Division of the W.I.A. will hold a Convention at Ballarat on Saturday and Sunday, 2nd and 3rd April, 1960. Dinner and entertainment will be provided on Saturday. Sunday will be a day of activities, YLs, XYLs and harmonics specially welcomed; Picnic style Lunch (tea and sandwiches provided if required). There is to be an All-Band Scramble, 80-6-2-1 metre Competitions and novelties with good prizes. Baby Sitters provided for Saturday night programme. Dinner and accommodation bookings (deposit £1) by 25th March, to Brian Stares, VK3ZBS, 17 Daffodil Street, Wendouree West.

OPERATION TOKELAU—ZM7DA

PETE ALEXANDER,* VR2DA/VK2PA

IF any one had stated that I would be operating ZM7DA in the Tokalau Group by early January, I would not have believed them, however strange things happen, and a casual mention on the VR2 7 Mc. net brought me into the picture. Allan Akins, VR2AP, the Fiji organiser of transport, etc., mentioned on the net that a VR2 c.w. operator who was prepared to take out a ZM7 call was required and efforts to this date, late November, had been unsuccessful. Doc W5PQA, the expedition leader, was anxious to get cracking as early as possible if the trip was to be made before the setting in of the hurricane season. After my acceptance, finalisation of Doc and Al's plans were instituted.

The 45-ton cutter, M.V. Maroro, was chartered and Tuesday, 29th December, fixed for E.T.D. Suva. Doc shipped out a KWM2 via air from the States, which was collected in Suva, checked and air tested by Al. My gear contribution consisted of modified TA12, Bendix SX28 receiver and 10 watt a.c.-battery operated portable for standby and mobile marine use. Several of the VR2 boys also contributed other needed equipment

We departed on schedule from Suva and the party consisted of Doc and Mrs. Meridth, Mrs. Akins (Al's XYL), myself, Captain Brown and eleven crew.

Mobile marine gear was quickly set up in one of the cabins consisting of the SX28 receiver, and mobile rig a.c. gas operated 110 volt alternator tied on the aft deck, half wave 7 Mc. dipole rigged as an L and a trap dipole clamped to aft mast for higher frequencies. VR2DA/MM contact was immediately established with Fred VR2CC, who was available to keep a continuous watch on 7040 Kc. for the next three weeks Suva received a late hurricane warning, and by the time we were out of the reef passage, seas started to build up, and by 5 p.m. we were running into gale-force winds and 30-foot seas, being the fringe of the hurricane that caused extensive damage to Port Vila (YJ1), Southern Viti Levu, and Toga (VR5)

At the northern Fiji Group, the skipper decided to take shelter for the night at a small cove (Nabauvatu) on the island of Vanuabalavu. Early next day, after receiving route forecast, and weather report via 7 Mc. net, and plotting course of hurricane, we proceeded again on course for Apia, Western Samoa, our first port of call, to obtain clearance and licence etc. for Tokelau. The seas had abated a little although the big rock and roll was still with us. 7 Mc. skeds were kept three times daily with the VR2 gang and necessary weather reports were passed via this frequency, and proved invaluable through the entire trip.

We arrived at Apia at 1200 hours on Saturday, 2nd January, after having two New Year eves at sea, and welcomed by Lloyd Webber, the Tokelau administrator, who treated the party to lunch and sight seeing. Our allocated call sign at this stage was ZM6AP/ZM7, but Lloyd promised to do all he could to obtain a ZM7 call from New Zealand

Departed Apia 1700 hours after rewatering, etc., and sailed due north for the Union Islands, still working mobile marine with 10 watts and getting excellent results from VR2 which was the main concern at this stage.

Doc did a little W5PQA/MM on s.s.b. and contacted his home station and several of the State-side boys. This section of the trip proved more comfortable with only moderate swells, nevertheless enough to make the women members seasick again

We arrived Nukumonu, Tokelau Group, Monday, 5th January, at 1500 hours after passing Niuafoou (Tin Can Island), an active volcanic peak, Swains Island and Fakafo Atoll, the southern group of the Union Islands. Seas, fortunately, were calm close into the reef and enabled gear, food, etc., to be transported through the narrow reef opening in the small double-ended boats made available by the Tokelauns.

Father Deorosiers had been informed of our coming and had us quickly installed in a section of his presbytery. Gear was set up, antenna erected and operation commenced with ZM6AP/ZM7 at 0605 G.M.T. on 5/1/60. At 1845 G.M.T. on the 6/1/60 we received a radiogram from New Zealand, via Apia, granting us ZM7DA, and operation was then commenced with the new call, which proved a time saving factor in operating.

Incidentally, the ZM6AP/ZM7 is officially recognised by A.R.R.L. and will count the same as ZM7DA for DXCC purpose. For those who worked ZM6AP/ZM7, a ZM7DA QSL will be sent, but don't be confused if you worked the pirate on 21 Mc. using ZM6AP/ZM7 on the 4th January. This guy seemed to be quite active, but was soon eliminated by our own constant activity.

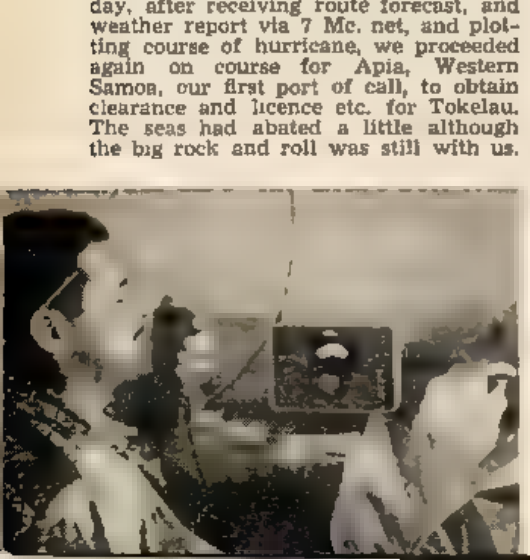
The gear was not without faults, the KWM2 chassis had to be distorted to obtain grid drive, but it operated f.b. this way. Doc handled the s.s.b. and myself the c.w. What pile-ups! I'm sure Doc must have crystal T notch filters in his ears to sort out the pile of s.s.b. C.w. was a little easier as far as I am concerned, and must say here that the KWM2 is a very smooth rig to operate, auto switching and break-in facilities which made it easy. The TA12 was also used on 28 Mc. c.w. for a time and operated very effectively into the G4ZU beam. The main antenna used was a high gain travelling trap, three-band dipole 30 feet high and rotatable, 7 Mc. dipole for VR2 information, and a 14 Mc dipole for stand-by.

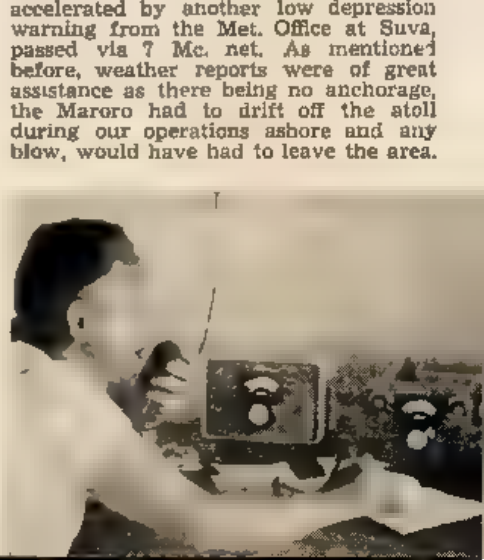
Radio conditions were just fair, good conditions generally except to Europe. We knew we were being called but most European signals had that rapid flutter which makes copy so difficult. Perhaps if the time had been available to match the G4ZU into the KWM2, signals would have been better. Our 110 volt a.c. outfit exciter section refused to excite, but this was overcome by the use of a couple of 6 volt accumulators brought along. 44 gallon drums of petrol were beached by the flotation method, and it was quite an experience watching the locals swim in from a quarter of a mile out or so, through the swell, pushing the drums with their chins.

Doc and myself took turns at operating. This enabled us to stretch our legs and recuperate after each session. Nukunonu is a very pretty isle, approximately 300 yards wide and 4 miles long. At low tide, only a few feet above sea level, covered with cocoanut palms, breadfruit, Kanava and Nuku trees, it is only one island in this particular atoll which consists of 30 islets surrounding a central lagoon, enclosed by reef

The hospitality of Rev. Pere Desrosiers, sister and people of Nukunonu is beyond words. We were fed and fetted like a regal party. Several local dances were performed for us and the children's plays were in English. The language there is a dialect of Samoan, and although several of the words are the same or similar to Fijian, of which I am conversant, it was necessary to have an interpreter, or use simple English. Doc and I took the opportunity during spare moments to do an odd job or two on the few domestic radio sets that are there New antenna leads, r.f. and aerial coil tune up, etc. The people are very self supporting, and apart from the copra, they grow and export, there is little other income, but they are very happy and contented.

It was a sad day, Monday, 12th January, when we had to depart for our return journey to Fiji, direct a distance of 980 miles. This departure date was accelerated by another low depression warning from the Met. Office at Suva, passed via 7 Mc. net. As mentioned before, weather reports were of great assistance as there being no anchorage, the Maroro had to drift off the atoll during our operations ashore and any blow, would have had to leave the area.





Left Pete VR2DA/VK2PA at Mike of ZM7DA. Right Doc W5PQA at Mike of ZM7DA

Gear was packed during rain squalls; the sea was building up and breaking on the reef. After consultation with the Tokelaun boys and Captain Brown via R/T, it was decided to try a light load first. This was successful but not without breaker shooting. Six trips were required under light load conditions, and not enough praise can be given the boys on the paddles. The only lost equipment was Owen's (VR2DK) power supply and few odd tools which now rest at 1,000 fathoms.

The return trip to Fiji was not without its events, many rain squalls, poor visibility, rough seas, and 40 knot gusty winds. Plenty of bruises all round, but we arrived safely at Suva, 1800 hours, Sunday, 17th January, a total distance travelled being 1,780 nautical miles at an average speed of 6.4 knots. The depression on the last leg built up to hurricane force and devastated Nine Island a day later—the second time in 12 months.

I thank Doc for having me along. On behalf of Doc and myself, thanks go to all the boys who assisted in making the operation a success. 3,000 QSOs were made and 65 countries worked. Regrets go to those who called but did not quite make it.

I might add that the cost of the expedition was considerable and was shouldered by Doc, without any thought of getting any of it back. As far as I know there were no sponsors and no free gear. It is understood that several of the W boys have made contributions since our return to Fiji.

Ask me if I would do it again. Sure, when do we start!

Dr. W. H. Meredith, W5PQA, and his wife photographed in Neville Stilwell's (VK3ACN) shack prior to their departure on Operation Tokelau—ZM7DA.

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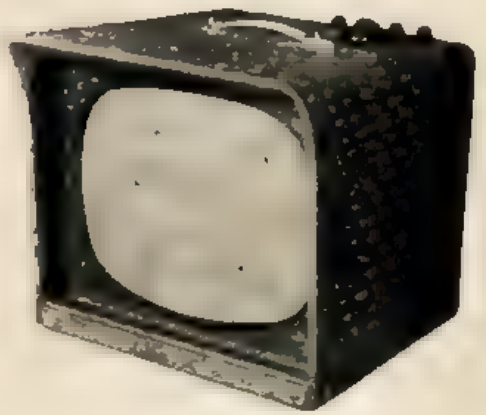

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DX

John C. Pinnell, VK2ZR
15 Summit Avenue,
Earlwood N.S.W.
Phone: UW 4248.

More has been written in connection with the rules and regulations concerning the DXCC Award than any other award available to the DXer. Most other awards are stable and have a fixed set of conditions which operate at all times. For example, the W.A.Z. has 40 zones, and when each has been worked that is the finish, each operator knows what he is shooting for. On the other hand, the DXCC rules are for ever changing to keep in line with the changing boundaries of various parts of the world. Some changes cause dissatisfaction and confusion among Amateurs, especially those who are near the top of the ladder and battling to get that extra country. Rumblings of dissatisfaction can be heard from time to time.

Here is an idea started in W-land by W0MLY which might get the approval of A.R.R.L. and the DX fraternity.

"This problem of DXCC countries is getting to be a headache, at least to me and many more that I have talked to about the subject. Having gone over the subject very thoroughly and given it much thought, I have come up with an idea that might get the approval of A.R.R.L. and the DX fraternity. It should solve the problem for now and also the future. I think the handling of the situation in VP2 land by A.R.R.L. was very fine but did not go far enough. The ZD4 to 9G1 situation was not the way, in my opinion, to solve that problem. **Basically the idea is, if they are going to make new countries, and they are as we all know, then they should delete the countries that no longer exist.**

"All stations would retain their totals as of the time the plan goes into effect. All countries that existed at one time, i.e. FI8, FN8, IAG2, MF2 Trieste, VP5 Cayman Islands, ZD4, 9S4, VO Newfoundland and Labrador, and Tana Tuva which no longer exist, would be on the list to be deleted. A.R.R.L. to make up the official list.

"Whenever a station sends in confirmation for a new country for DXCC credit, one will be credited and one deleted; if he has any of the deleted countries to his credit, the total to remain the same until all of the deleted countries on the deleted list have been off set by confirmations from new countries.

"Example' W0MLY has 274 total including FI8ZZ and MF2AA. He sends in XE4B and VQ8BBB; he is credited with two countries and FI8ZZ and MF2AA are deleted, his score is still 274. This would continue until all deleted countries have been offset, then upward from there. No station would ever go lower than their present listing. This does not effect the countries on the banded list as they still exist as countries.

"This will effect some, including myself, but wherever progress has been made some have had to suffer so the majority could have the benefit. This may not be the complete answer, but it is a start. Let's do something to make it equal for all."

NEWS AND NOTES

The HC8JU contacts will in all probability be no good for DXCC credit as it is understood he was not ashore at Galapagos Island. (2QL)

ZL3VH/3 has been operating from Chatham Is. His signals were not very strong but easily contacted from Sydney.

Keep a look out for DXpeditions operating from Marcus and Chesterfield Islands which are to start in April. (2QL)

CR6CA is planning to go to Portuguese Cabinda so watch for that one. (2QL)

Union Islands) ZM7DA, with Peter Alexander, ex-VK2PA as one of the operators, had a successful if not trouble-free DXpedition. Over 3,000 contacts were made in approximately 70 countries. At one time the power supply was held together with wire. The sea was rough during the loading stages and one power supply finished 40 fathoms down in the drink. Peter was well looked after and put on 7 lbs. in about a week and would have liked to have stayed much longer. The boys found Europe very hard to work. Just to add salt to the wounds for VK boys, Peter says "postage in the Union Group is 1d., 2d. and 3d., and the P.O. opens four times a year. (2QL)

VR3W informed me that VR3V and VR3X both have returned to the U.K., and may be contacted through the R.S.G.B. (3AOM)

W5PQA, Doc and Mrs. Merideth, of Albuquerque, New Mexico, spent a few days in Bendigo with VK3ACN. Neville met them at their home in America last year.

Don JT1AW has been putting a very strong signal into Sydney around 1100z. Apparently the Ws could not hear him as most of the time he was not working any stations in that direction.

UI8AC, UI8AK, UI8KAA, UL7JA, UL7KBK, and UM8KAB were some of the more difficult U.S.S.R. stations that came through with very good strength on 14 Mc. from 0900 to 1200z. These stations could be heard on several nights and were fairly easily worked.

VU2ANI/5, Andaman Is., gets my bouquets for the month. Rao is a good op. and he handles the pile-ups very well. He is not going to the Nicobar Is. as he tells me there's already a Ham there. (I have not heard him.) (4SS)

There are about 4,000 Amateur Stations in Japan. These are divided into four classes. First class c.w. and phone and second class c.w. and phone. (JA1ACA)

Rune OX3RH is a new one from Greenland and is looking for contacts from VK and ZL. He was worked here at 1150z on 14 Mc. (2ZR)

ST2AR in the Soudan is being worked by VKs on the 21 Mc. band.

ACTIVITIES

14 Mc. C.w.

2AGH* DL1BH*, FB8CJ*, HC8JU* HB9MU*, HZ2XG* UA1AH*, UC3OM*, VP2LO*, VP2AR*, VP5BL*, UI8AK* VQ2GW*, VQ3HD*, VQ4FK*, VQ4GE* VQ*BBB* UH8KAA*, VU2ANI*, VS4FC*, VR2DK*, ZB1FA*, ZC4IP*, ZE3JE*, ZD3HO* ZM6AP/7*, 4X4JU*, 9M2FR*

2QL: F3CB/FC*, OQ0CZ*, VQ8BBB*, VU2ANI*, VQ2s*, VQ3s*, VQ4s*, ZB2A*, ZM7DA*, ZL3VH/3* FQ8HK, JT1AW, SU1MS, ST2AR, CN2AY, CT3AB.

2ZR CM2QN*, CX2BT*, CT1JY*, DJ4VD*, EA1BC*, F9BO* FB4XX* G3DBZ* GM3WO*, HA8KCA* HB9DX*, HL9KJ* HC4IE*, HC8JU*, IT1AQ*, JT1AW* KL7AGX*, KP4CC* KM6BI* KR6IY* KV4AA*, LA6ME*, LU8NA*, OA4FN*, OE3SYE*, OH3OR*, ON4CB* OX3RH*, OK3QR* OZ1QM*, PA0PAC*, PY1GJ*, SM3BIY* SP9BZ*, UA1CI* UA0LC*, UB5DW*, UI8AK*, UL7JA*, UM8KAB*, VQ4FK*, VS5PM*, VS6DV*, VU2BO*, YS1O*, YU1KA*, YO3RI*, XZ3BB*, VK0IT*, ZL3VH/3*, 4S7EC*, 9M2BK*, ZS6IX*, plus 74 other Europeans worked.

2AMS CM2QN* DU1AJ*, GM3FHH*, HB9MU*, OA4BP*, OA4FN*, KM6BI*, VU2ANI*, XZ2TH*, ZM6AP/7* ZS7M*, 4S7NG*, CR9AH, EA8CP, EI9Y, FR7ZD, HC8JU, HL9KR, MP4BCU, KW6CB, OQ5LL, UI8AK, VQ3HH, VU2KV VR1B 4S7EC

4DO W/K* KH6*, CM2QN*, JAs*, KR6GF*, VU2ANI* ZM7DA*, CR4AH, CR7IZ, DU1SV, HC4IE, VS9OC, UA1KAE, UA9KOG, ZS3JA, 4X4HD, 4X4JJ, 4S7EC

4SS CM2QN*, CR7IZ*, FQ8HQ*, HC8JU*, HL9KR*, JZ0DA*, MP4BCV*, PJ2CP*, TI2PZ*, TI2CAH*, SU1MS*, UH7HC*, UA1KAE*, UA0KAE*, UM8KAA*, VE8AAE/SU, VQ6NG*, VU2ANI*, ZE3JJ*, ZS7M*, ZM7DA*.

BERS-195: CM2QN, CN2BK CR7IZ, CT3AB, EA8CP, ET2VB, FA8IH, FB9XX, F3CG/FC, HC4IE, HC8JU HL9KJ, KV4BQ, MP4BCV, MP4TAF OA4FN OQ5IG, UI8AP UM8KAA, VK0IT VK0TF, VP9EP, VQ2GW, VQ3CF VQ5EK VR1B VR2DA/P, VS4FC, VS9OC, VS6DV VU2ANI XZ2TH, YV5AE, ZB1AQ, ZC4MO, ZL3VH/3, ZM6AP/7, ZK1AK 4S7EC, 5A2CV, 9M2FR, HB9YG/MM K6HDI/MM, KA6UD/M, OH5NR/MM, ON4TZ/MM, SM6BTM/MM, SL8AY/MM.

14 Mc. Phone

2AMB* DU8PPT, I5GN, VR4BW, VU2BK, ZE7JZ

2AQJ s.s.b.: G2HQ*, I5GN*, KR6GF*, W2MAF* W6YIB* (YL)

2ACN EA3NC*, IT1TAI* MP4DAA*, VR2s*, VS9OC*, VQ8AL*, VU2ANI*, VS9MB* (Maldives) UA0LO*, KW8AL*, Ws*, YN1ED*, ZC4MO*, ZM7DA* 4S7s*, 9M2FX*

3AOM DL7HA/MM* FK8AU*, KH6ATS*, KR6IV* KW6DA KM6*, OA4IGY*, TG9AL*, VE3BWY*, VE7QE*, VR2DP*, VR2CC*, VR3W*, VU2ANI*, VU2DR*, VU2ED*, XE1HC*, XE1LA*, XE1RM*, XE1UV*, XE3CW*, YV3BS*, YV5BS*, ZM7DA*, 4S7SN*

4DO W/K* KH6*, JAs*, EAs*, CE3CO*, KX6CO, VR2CC

L2001 EA3NC, CE2LA.

L2048 GZPU, G3GYH, CO8OK, I5GN, KH6AIJ, KH6BBY, TI2FW, TI2VBM, VS9OC, Ws, 4X4HA, 4X4HK, 9M2DQ.

L2065 EA3JE, FO8AX, CR7IW, I1RIF, I5GN, MP4BCC, TG9AD, 1T1TN, G3HFD, SM5ACC, TI5CV, VU2BK, VU2KV, 4X4AS, KR6IK, VS6DJ On s.s.b.: EA3JE, DL4UQ, HB9FU, KA2DE, SU1MZ, SV0WB, VQ4FB, XE1CP, ZS6KD, 9M2AZ, 9N1GW

L2065 CE2CO, AP2BH, FO8AX HP1HP, JA, KP4, KM6, KH6s, KR6s. KA8s, KR6s, KX6s, I5GN TI5CV TG9CP MP4BBC, VK0CC, VR2s, VK8HI, VS9OC, VU2ANI VU2VR, XE1, XE2, 4X4AS 4S7YL. 9M2GA ET2US, BV1US, DL3LL, KA7, KC4s KG6s KX6 KV4s, HP1LO, W/Ks, YV5s, YS1MS. TG9AD TI2RC, MP4BBW LA6BC, ZL3AH ZK1BS. VP6WB, VP7BI, VE3DIF, VU2CQ VS4JT, VS6DR VK8NT, SV0WB, 9M2GR. 9N1GW, 9K2AZ

L2075 TG9CP TG9PS TG9TI, TI2HP VR3W, VU2GE, KA2NA I5GN XE3CP MP4BCC, MP4DAA, HS1BB FO8AX, VS9OC, KH6s, KR6s. On s.s.b.: KA2YL, KC4USB, KV4AA, VS6EK, UB5KAB, XE1CP, 9K2AZ

L2080 and L2081 EA2DP, HL9JK, KG4AL, KR6IK, KA2BD, TG9AL, TG9CP, TG9TI, TI1ES, SV0WAC, UA0LO, Ws, XE1KS VR4DW, VR2DP YV5AO

BERS-195: G3HFD, PI1VKL, VS9OC, 4X4AS.

21 Mc. C.w.

2QL HC1JW*, VS9OM*, ZE3JL* ZM7DA*,

2ZR DL1LL*, DU9JO* FS7Q*, GM6P* GW3CB* HC1JW*, KA2DE*, KG6AAY*, KR6ZT*, KZ5TD*, LA5HE*, OH3OR*, OZ5HS*, PA0PN*, SM7BLA*, SP5FZ*, UA0CF*, VQ2CZ*, VQ4FK*, VU2XG*, ZS5BA*

2AGR Gs* W/Ks* OR4KR*, VQ4AD*.

4DO W/Ks*, DJ1XZ*, DJ3LM*, DM2AHM*, DJ4SO*, DJ2KS*, DJ5BD*, G3FXB*, G3MRP*, G3AWN*, G3BHW* G3KHZ*, G3LIG*, G5HB*, G5RI*, G5DQ*, GW3KSQ*, GW2DDX*, LA5HE*, OH2NB* OI1SRC*, ON4SB* OQ5PS*, OZ7UU*, SM2BYW* SM5BZ*, SM5BIR*, SM6VY*, UA0CF*, UA1NA*, UA6IF*, UA4KHN*, UL7JA*, UC2BB* UA3GM* ST2AR*, VS5PM*, ZS6BA*, UA1CK, UA9VB, UB5KFF, UR2KAE, DL3ZM, DL7BA, F8PA. F8VQ, G3AAE, G3HLY, HG8AQ, OK3OV, ZM7DA, XZ2KM.

21 Mc. Phone

4DO W/Ks*, KR6s*, G3IRD*, HB9RB*, HK4EB* OE3HW* OH8NQ*, OZ7UU*, PA0UD*, PI1VKL*, ST2AR*, UA0LO*, UA1AB*, UA1NA*, UL7JA*, VS1GQ* VU2ANI* VU2GE*, 4S7YL*, XW8AL* 9M2DQ*, G8TH, GM3EDQ, GI4RY, HC2KU I1RIF I1XIDC MP4BCC LA5LG, PA0RE* UB5LV, UR2KAE, VS5GS, 9M2FX

L2001 CE2CO HB9AJ I1AJ JA3IS KH6BPF, SM3BIZ, UA1AB, VU2ANI, ZD8DT, 9M2DK.

L2038 and L2051: AP2PY, DL7BA, GM3DPL, GM3KEZ, FA2TW, JA2KS, I1VA, I1CQD, I1QS, KH6BPF, KR6DZ, KP4GN, KR6KM, KA2BD, OH5MW, OH1TY, OQ5CJ, PY5ATA, TR8TI, SM7TQ, YA1OP, VS1GQ, VU2ANI, 4S7YL, 4X4FZ 9M2DW, 9M2DQ 9M2FX

L2071 G2PU, JA8MW, F8LE, ON4BX, VS5GS.

L2072 F8US, KH6HR. KH6BQG, OD5BT.

L2085: W8JFJ, KR6HR. VK9VM, 9M2DQ, VR2BC, VK0HA, G5HZ, G3JAF, 5A3CV, I1UA, G3KFT, DL3KT, KC4USK, FO8AX, LU3AQ, VP6KL, KP4GN 4X4JS, KB6BH, XE1ZM, VK9RO, VS6CJ SM6RS.

L2055 G3AB, G5HZ, GM3KEZ, GW3AHN, GI3NSP, DJ4EA, DL4SFG, CE3WZ, I1LB, JA3GM, JZ0HA, OH5NW, OH8SM, KR6ID, KR6KM, KA2MK, KH6FAF, HB9KO, F9BO, I1BVM, KL7DEP, VS9OC, VS6CL, ZC4FR, ZC5SF, VU2KV, VS1GZ. 4X4GB, 9M2FX, 9K2AL.

2AGH: Ws*, KHs*.

28 Mc. Phone

L2065: JA3KX, RA3GJ, K6VOI, W8BAD, G3HJO, XW8AQ, EI3Y, G2XK, G3NAS, G3CIQ, OH5NW

L2072: G2XK, G3BGL.

L2074 On 50 Mc. December: VK2AQI, 2ADE, 2ADT, 2AXI, 2AAX, 2ZER, 4CU, 4PI, 4NG, 4WD, 4PG, 4RH, 4AX, 4HD, 4PU, 4GG, 4ZAP, 4ZAA, 4ZAZ, 4ZAX, 4ZBZ, 4ZBL, 4ZBT, 4ZBI, 4ZBY, 4ZBA, 4ZBE, 4ZCH, 4ZDL, 4ZGL, 6FM, 6RW, 6WG, 6ZAY, 6ZBP, 6ZCB, 6ZHJ, 6ZBY. Some of these stations were heard several times.

VS1JW—(From Toowoomba, Qld.) John Kaarsberg, 32 Chartwell Dr., Serangoon Gardens Estate, Singapore. (BERS-195)

ZE3JW—Dan Windell, Cam and Motor Mine, P.O. 57, Effel Flats, Sth. Rhodesia.

9G1BQ—John Woodcock, via W3CTN. (BERS-195)

4S7EC—Box 907, Colombo, Ceylon. (2QL)

VU2ANI—Via W8PQQ.

ZM7DA—Via W7PHO. (2QL and 3AOM).

TG9AL—Via W2CTN 3AOM)

VQ6NG—Via Bureau; is ex-ST2NG; QSLs 100 per cent. (4SS)

HL9KR—John Derrick, 1248 A.A.C.S., A.P.O., 970 San Francisco.

VE8AAE/SU Via VE Bureau. (4SS)

(Continued on Page 21)

* Call signs and prefixes worked.
z zero time—GMT.

S W L

Maurice Cox, WIA-L3055
Flat 1, 37 Boyd Crescent,
Olympic Village, Heidelberg,
N.23, Victoria.

Hi chaps, here I am again with the news and doings of the s.w.l'ers in "Down Under." Have plenty to write about this month so will get right down to business.

VK3 S.W.L. GROUP

At our last general meeting, held on 21/1/60, the office-bearers were very pleased to have 13 members in attendance, which I must say was very gratifying. The meeting opened with loads of correspondence and quoting Ian Thomas, "It took me an hour and a quarter to read, and was I dry?"

Re our drive for new members. I may have mentioned in past notes that we sent out 120 letters to associates to join the ranks of the s.w.l'ers, but am sad to say we could only welcome 10 new members, but nevertheless we will continue to press on.

We discussed the awards and constitution for the S.w.l. Groups and our comments were made and by these we hope to have all the S.w.l. Groups in Australia under one constitution. We elected a Federal Contest Committee and they are as follows: Mike Ide (President VK3 Group), myself, Mac Hilliard, Tom Haywood, Ted Wickett and Peter Neilson. These are the six who will receive all contest logs and cards, etc., for awards in the future. The award will be of a certificate type and will be designed as soon as possible.

With the consent of Council we will be changing our meeting night as follows: The last Friday to be our general meeting night, but also we will meet on the second Friday of each month and this will be a constructional night and other business that needs attention. This pleased all members. We think we will be able to do more for the Group in all ways.

We also hope to set up a receiving station at the club rooms; at one stage we were promised an AR8 receiver from an Amateur in the country. We can't find out who it was as Ian Hunt has our minute book, but soon we hope to have it all worked out. We will build converters for other bands, so we suggest any of you s.w.l'ers who don't come along to the meetings should attend as a good and interesting time will be had by all.

On May 31 we have arranged a visit to the Herald office in Flinders St. The maximum number allowed is 48. I wonder if we will have that number? How about it, chaps, I am sure you will all enjoy yourselves. Let me know if you can come as we would like to know how many will be along. In April or May, Fred 3YS will give the Group another fine stereo demonstration. Date will be advised later, so watch the notes. Also a visit to his shack later in the year.

At this stage I would like to say "thank you" to Ian Thomas, L3065, for the help that he gave me at the beginning of the year when the pressure was on. Thanks again Ian and we all hope you do well at the Uni. this year. Bert Stebbings has been ill with pneumonia and is away on a long earned rest with 6 mx mobile gear. Hope to see you back on deck against Bert; all the best of health from us all in VK3.

[illegible]

A fair amount but will keep it short as I went over the page last month and the s.w.b.c. notes were left out. Firstly, from Ian L3065. He says that soon we will have to start editing the correspondence. You can say that again Ian. Spent one night winding coils for 40 but so far they only seem to be working on the 3 metre s.w. band. He expects to put some more turns on the osc. coil. No, Ian, leave that one for the s.w b.c. and wind another OM. He heard four new countries—CR9AH and XZ2AD on s.s.b., 20 mx.; 4S7YL and I5GN.

Now from a prospective new member, Bill Wignall, at Ballarat. He has a new rx, double conversion 11-tube, 5 megs to 455, and now has to put up a half wave doublet.

Next from Tom Haywood, who has a letter from a pen friend, John Gibson, Reseda, California, U.S.A. John says, "my rx is a 30-tube Scott philharmonic. Some years old, but it works fine. Very hot on 2 megs when that band is working, but very often the band is dead. Rx has two stages of r.f., four i.f. stages, four audio stages, and variable bandwidth, tuning from 2 to 16 Mc. Heard Omdurman, Sudan, 11855 kc. loud and clear, they sign on at 0415 and close around 0530 GMT."

Gerry Albeck sent along gen on the s.w.b.c. bands, but space won't allow for this month. Thanks, Gerry.

VK4 S.W.L. GROUP

Don't forget you interested s.w.l'ers in VK4 land. Contact Mr. Bill Davies of 14 Belgrave St., Hawthorne, N.1, Brisbane, Qld.

VK5 S.W.L'ERS

Another letter here now from Trevor and Colin Hutchesson, of Yahl, via Mt. Gambier, S.A. Here are some of the contents. They are pleased about our full page in "A.R." Then tells me re the bush fire network in S.A. I would like to put them all in Trevor, but space won't allow. Trevor is 14 and Colin 16. They have been associated with radio for nearly three years. At the moment they are using a 6-tube battery set (dual wave) covering frequencies from 550 kc. to 33 mc., and also four Amateur bands. They have a pre-selector almost completed and a 6J6 converter under construction which covers 15, 10, 6 and 2 mx, so all bands will be able to be received. Their shack is also nearly finished, it is 9 x 8. Antenna is a multi-band type, centre fed, being a half wave on 7 Mc.

VK7 S.W.L. NOTES

Letter and notes from Ted Beard and he would like to take this opportunity, on behalf of their President (Mr. Pat Geeves) and all Tasmanian s.w.l's. to wish all other s.w.l's. in Australia the very best wishes for 1960.

He is pleased to announce that the little acorn is growing—two more new members last meeting, with a probable three more by next. TKA came to the fore again during the Dec. meeting and explained how s.w.l's. could assist their licensed brothers by giving detailed information concerning equipment under test, etc., also to watch those S meters (I am sure some of the lads forget to put the correct shunts across some of their meters!!). Another very important point brought up by TKA was directed to the members concerning the use of transceivers and/or transmitters by non licensed members and the tragic results. He knows it could be a temptation to some of the younger lads and probably some of the not-so-young, however the fruits of Amateur Radio must be earned by examination—so go to it chaps, good luck.

Len 7LE has consented to give a talk on converters at the Branch meeting. Now this talk is really something and Len has the art of making the most intricate things sound simple. Thanks Len, hope your talk will spur a few more of the VK7s along.

WESTERN AUSTRALIA

Don Pratt, WIA-L6006, is an ardent listener of the sw. bands. He is 46, married, and works shift work in charge of the boiler panel as a boiler controller at the local power station. He was in the R.A.A.F. in 16 N.E.I. Sqd. as a tail gunner—couldn't get Morse past 10 w.p.m. so gave the radio side away. This is the reason that he does not bother about going for his ticket, but still gets a lot of fun from listening.

Rx is an American BC348, an 11-tube job with a freq. range of 1.5-30 Mc. With this is employed a 1-tube pre-selector (6AC7) and four pairs of plug-in coils, giving it a range of 2.8 to 30 Mc. Antenna is inverted L type, 40ft. high and 45 ft. long.

S.w.l. cards to date total 150 from 83 countries, plus about two dozen letters of verification. Besides being a member of the W.I.A. and N.Z.D.X.R.A., he is an official monitor for "Popular Electronics" with the call of VK-6PE1A. He's not very interested in listening to Amateurs at all, but concentrates on overseas s.w. stations, so was very pleased to see notes on DX activity other than Ham stuff in "A.R." By the way, if any member has a BC348 over here he has the full dope on it from the Library of Congress, Washington, and can pass on information re aligning, voltages, etc. Thanks for your letter, Don, write us again soon.

NEW SOUTH WALES

Tim Mills reports that the annual convention is over and what a day! A total of 412 persons were present. They did not hold their exhibit as it appeared that nobody had any gear to show off, but many members made up for its absence by working. He found them everywhere, car parking, on the gate collecting the cash, serving in the disposal section, in fact everywhere. We thank each and every one of you for the help that you gave. It was very pleasing to see so many of the country members down hope to see you next year.

No meeting was held last month (Jan.), but now we have our club rooms at St. Leonards we will endeavour to hold regular meetings. If anyone is coming to Sydney at any time, come out and see me, the address is 14 Atchison Street, St. Leonards, 100 yards from the railway station.

Office-bearers of the Group are worried about the lack of interest by members within the Group. It is known that the same thing is happening Interstate, but as little or no interest is being shown in both meetings and general activities, it makes the going a bit up hill. The membership is 183 at the moment, but they have not caught up with some who have become full members.

Some thought at the moment is being given to the production of a Handbook for use as a guide to the s.w.l. in this State. Nothing has been done yet, but if anyone is interested in such a publication, please contact the Secretary. This appears to be the answer to a lot of the non activity.

Don Grantley is next with his usual fine lot of DX news. Thanks, Don.

OVERSEAS S.W.L. AWARDS

This is the first of a number of s.w.l. awards which we will pass on in this column. This month's is the H.O.S.A. Award. It is issued by the Antwerp section of the U.B.A., its object being to create international goodwill and friendship. Requirements are 10 Antwerp stations confirmed, log entries are not be earlier than 31/12/53. They don't want the cards to be forwarded to them, but log extracts which will be checked against local Amateurs' logs are sufficient. The log, together with five I.R.C's. to cover costs should be forwarded to H.O.S.A., Box 331, Antwerp.

DX INFORMATION

MP4QAO will reply to s.w.l. reports only if he receives an informative report as well. This report must refer to more than one transmission. It's not that Bryan doesn't like s.w.l's., far from it, but he is very short of cards and can only reply to the best reports. "Personally," Don says, "there should be more of it, would sure raise the standard of listener reports."

9G1CO will reply only to reports containing an I.R.C. His address: Dennis Parker, P.O. Box 3445, Accra, Ghana (Thx "Monitor".)

Gerry Andrew, an American s.w.l. friend of Don's, gives further information on the W4BPD DXpedition. It starts on 1st March from New York City, then goes to CT1, EA2, 7G1, EL2, OG1, CR5, OQ5, VQ3, VQ4, VQ3, VQ1, VQ7, ET2, VQ6, FL8, VS9, HZ1, 4W1, SU1, OD5, YK1, DL6, G GW3. He probably won't get on from all these and the many other places where he may visit, but will come on when he can.

YA1AO, who was on recently, has caused some confusion to the s.w.l. boys as to where reports should go. Official news is that he is DL1AO and can be reached via Box 4044, Frankfort, Germany.

Radio Sofia presents an Amateur and S.w.l. programme, including DX news, etc., on 9.7 to 2005, 2140-2210, and 2300-2330 GMT Beamed Mc, the first Friday in each month at 1935 for the first two times to North America and the last to England. Believe they are readable out here. Further info. from LZ1KBA, C/o. their Bureau at Box 830, Sofia. LZ1UA tells me that he appreciates s.w.l. reports.

DX AND S.W.L. PROGRAMMES
(All Times in E.A.S.T.)

Prague: 1st and 3rd Friday monthly at 1030 and 1500 on 9.55, 11.745, 15.23, 15.285 and 17.895 Mc. Repeated on Sats., at 1300 and 1830.

Denmark: Tues. at 1220 and 1350 on 9.52 Mc Thurs. at 1950 and Frid. at 0050 on 15.165 Mc

Finland: Sat. at 0200-0230 on 6.12, 15.19 and 17.8 Mc. Sat. at 2130-2200 on 15.19 and 17.8 Mc

Cologne: Every 2nd Mon. at 1730 on 11.795 and 21.65 Mc Tues at 0100 on 21.49 and 17.87 Mc, 0430 on 15.375 and 17.85 Mc., 0830 on 11.795 and 15.375 Mc., and 1200 on 9.64 and 11.795 Mc.

Haiti: Mon. at 1130 on 49.31 and 25 Mc., Tues. at 0430 on 49.31 and 16 Mc.

I.B.R.A. Radio: Last Wed. of month at 0330 on 9.275, 11.517 and 14.829 Mc

Budapest: Every Wed. at 1130 and 1400 on 7.32, 9.833, 11.910 and 21.685 Mc.

New Zealand: 1st Wed. each month at 1630 on 11.83 and 9.54 Mc

N.Z.: This Radio Age, 1st Wed. every month at 1815 and 2030 hrs. on 6.08 and 9.540 Mc.

When reporting on Kenya b.c. service ask for their technical sheet on receiving aerials. Address: Kenya B.C. Service, Box 631, Nairobi, Kenya.

V H F

Frank P. O'Dwyer, VK3OF
190 Thomas Street,
Hampton, Vic.

50 MEGACYCLES

The band held good for the first couple of weeks of the New Year then the openings eased off with a revival in the first week of Feb. This week provided quite a show with the three-hour reception of the Adelaide Channel 2 station in Melb. on the Monday afternoon, on Thursday a good Es openings VK3/VK5 (afternoon again), followed by a short, sharp burst in the evening and the probable reception of KH6 in Adelaide at 2030. JA was not out of the picture though openings were not too frequent. TE has made its appearance in the north and the VK3 gang hope that the pattern set a couple of years ago comes good again with JA TE following a week after KH6 dropping sigs into Adelaide. Max 4HD heard K9 on Jan. 7, so there is still hope in that direction. Keith VK0ED should be operating during March, sked times when available will be forwarded for Divisional broadcasts. Though you may consider the DX season past, keep an ear listening in that direction, you may hit the jackpot.

For those who have now made W.A.S. by contacting the Northern Territory or some other wanted Division with cards being on hand, make your application for W.A.S. V.H.F. direct to Mr. A. G. Weynton, VK3XU, Federal Awards Manager, 5 York St., Bonbeach, Vic. Holders of the certificate to date are VKs 3HQ, 2VW, 2WH, 2WJ, 2ABC, 2AEZ, 3GM, 3HT, 3PG, 3RR, 3XA, 3ZD, 3ACL; 4HR, 4RY; 5LC, 5MP, and 6DW. We do not hear too many of these fellows around these days, maybe the bug will bite again in the future.

Now that another Ross Hull Contest has ended and while it is still fresh in the mind it is up to all those who participated to assess the Contest with particular emphasis on the rules. Discuss the Contest over the air and propound your views. When you have established what you want, let the Federal Contest Committee know how you would like the rules to be. Do this in time to allow consideration of your suggestions before the rules are promulgated for the next Contest. Do it early, it is no use sending in ideas, say, in October, if the Contest is to start on Dec. 1

Notes.—My apology to the VK3 V.h.f. and T.v. Group and 2ABZ (the script writer). After a break of several months, notes for this issue were received in plenty of time. However, they have been mislaid and not found at the time of going to press.—3OF.

NEW SOUTH WALES

What a grand New Year we have had so far. At the time, Dec. 29 appeared to be the day of days with variety the theme. VK2-9 inclusive. Jan. 1 saw an equally good opening with emphasis on VK5 and 6. Jan. 2, however, was just out of this world and commenced with Keith ZL2DS, just back from holidays, at 0755, and then the band raged open until 2300. Every local shack would have required at least three ops. to handle the traffic and then would have missed calls. There has been no comparable opening to VK3; they were there by the dozens. Every VK2 had 6 or more waiting a contest, even chaps near 51 Mc. were doing more business than ever before. One seldom called CQ, just QRZ after each contact. The handling of their v.f.o's. by these VK2 Z callers would put 40 mx veterans to shame.

For once VK4 were out of the picture, but VK5s came up in large numbers with VK6WG mixing it with them. VK7 was there and late afternoon saw ZLs 1 to 4. I never saw the like of this in 1950-51 as a listener and certainly not as an operator. The 9 to 5 working types have been kept interested by regular evening contacts with 4ZBE, 4NG and co. Jan. 16 produced scattered openings with VK4 and VK7 in at the same time, and some VK5s. At 1200 sharp, JA came up working 2WH (must be a regular sked, a plague on these gentleman farmers) and at the same time the local abomination, Channel 2, with tone which almost wrecked the first megacycle of the band. Just managed to work two JA3s, a new district for me, giving 52 points for 12 contacts for the day.—2HE.

VICTORIA

Quite good at the beginning of the month but faded dismally towards the end. The period opened with VK4 and 5 on the 1st, 4th to VK2 and 4 with Peter 4ZDO portable VK3, "fixed mobile" at Tenterfield working quite a few locals. 6th, VK2 and 4. 7th VK2, 4, 5, and ZL. The 9th was the "spectacular" with the band opening to ZL early, then short to VK2, Sydney area. Quite a few Sydney contacts were made. Early p.m., VK5 and 6, later more ZLs, then VK4, 5 and lastly to VK6. Fact was that until 2330 VK6 were being copied in Melb. like locals ragchewing. The day was historic for 3AHL who made a two-way sideband QSO with ZL2DS, which is believed to be the first VK3/ZL sideband QSO on 50 Mc., might even be the first VK/ZL on this band. VK6 were paralytic for most of the evening.

11th, VK2 and 4, ditto 12th, 14th VK4. 16th, JA0 was heard at this QTH working VK3, 4 and 5. Plenty of activity outside the band with the buzz saw on 49.9 Mc. and a reportedly Russian t.v. video on 49.6. VK2 and 4 in also. Nothing to note until the 26th. VK4; 27th, VK4 and JA1. The 28th with VK4 just about saw the month out tamely.—3ZGP.

QUEENSLAND

Here is where I generalise. According to my log we have had quite a few good openings via Es to VK3, 4, 5, 6 (for a lucky few, 4PU for example) with shortish periods to VK7 and 2, also quite a few ZLs were worked. Then we had a JA or two as well as the VK4 Townsville gang. 1200-1300 on 6th, JA0 and 1. 7th, ZL, VK3, 4, 5, 7; the 8th, Max 4HD heard K9 at 52 at 1040, at 1220 John 4PU worked 4NG, 5S; to think that I wasn't listening. 1455 on 9th, ZL3QK. Es again on 10th, 11th, 12th, and 14th; worked Adrian 2HE again, very pleased.

15th Es, 16th, 1255-1345 JAs 1, 2 and 3 were in again at S7/8, also video from some t.v. up topside at S9 plus, Es 1730-1906 to VK3, 5 and 7 and had a QSO with Hugo 2WH until we lost each other. Things a bit poor then until the 22nd when 3s were around again, also JA1BWD dishing out Contest numbers at 1414, gave me 005; 23rd JA3NF around but scratchy at 1430. 24th, 0030-1027 VK5 and 7. Since then don't know what's happened as I had my generator go up in smoke, then I got the emergency one going on Jan. 31 and worked my old mate, 4HD.—4ZB1.

SOUTH AUSTRALIA

News this month very similar to other Divisions, openings to all States with JA and ZL, plus Russ 9XK thrown in for good measure before he came south. Our DX champ, Ron 5MK, reports hearing some very strange signals from the north east. One in particular had him intrigued, a suspected KH6 signal with a woman-like voice. Barry 5ZBZ also heard the signal and any reports of KH6 activity would be appreciated by the above, particularly if there is a YL operating 50 Mc.

Three nice openings to VK3 recently, one in particular Friday 8th at 1430 was exceptional, 59 sigs with not the slightest QSB, lasting for 45 mins. Dane 4ZAZ's signal copied here regularly every morning until the fourth week in Jan., signals fading, generally about 0930. Also a couple of midnight contacts with Wally 6WG by those who were on at that hour. Bill 5ZAX still operating portable from Maitland on Yorke Peninsular, sigs 9 on peaks with slow QSB. Bill reports several contacts with JA in the early evening from that location though no sign of them have been heard in the city.—5ZAW

NORTHERN TERRITORY

Operating from the premises of the local b.c. station, John 5ZDL, from 6/10/59 to 30/10/59, has JA1, 2, 4, 6, 7, 9, 0 to his credit. The JA signals came through here after the skip moved over from VK4, mainly between 1900-2000 S.A.S.T. and fading out 2130-2300. Usually S7 to 9 plus. One interesting incident occurred on Oct. 10 when 5ZDL heard the JAs working VK6BE, so abandoning the JAs, John swung the beam in 6BE's direction, heard him and called, but no result. JA QRM? Other signals were heard on 49.87, .78, .78, .68, .62 and f.m. on 49.6 Mc.

VK3XK was heard working JA. A patchy contact was made with 4ZBE on Dec. 28, 4ZBE's sig was R4, S4/6 due to QSB and apparent lack of audio at that end. John has changed QTH, a habit up here apparently, and now has the 4 el. close spaced Yagi on top of a 70 ft. tower. Subject to variation, due to shift work, he will transmit every 15 mins. for 5 mins. and listen for 5 mins. between 1900 and 2200 every evening (S.A.S.T.). John is running 60w.

There will be two mobile rigs operating here shortly. John hopes to be running 50-60w. mobile by Feb. 10 with his CQ into a quarter wave whip. I will be running 15-20w. and hope to be on very soon also. In the event of a break through that cannot be worked satisfactorily it will be one mad dash for the Yagis. So all we have to do now is to wait for you chaps to crank the beams around and stir a few electrons our way, we will not complain of VK QRM on 6.—5ZDW.

TASMANIA

Nothing startling this month; Es openings to VK2, 3, 4, 5, with ZL on the 6th. Best openings were on the 6th, 7th, 11th, 16th. Col 7LZ ended the Contest with his highest score ever. Believe there are some new VK7 calls on the band from Hobart—7PF.

144 MEGACYCLES

NEW SOUTH WALES

Jim 2PM went touring southern N.S.W., playing 40 mx from the car and decided that he would like to better the 233 mile contact 2HE/2AHH/P on 144 Mc., Killara to Ebor. 3HE suggested Green Cape, Twofold Bay, south of Eden as having better possibilities than mountain tops in the Kosciusko district. He arranged to contact Allan 2RX daily at 1800 on 40 mx. 144 Mc. tests were carried out from Canberra, Adaminby and a couple of spots near Kosciusko with nil results. On Friday night, Jan. 15, Jim came up on 40 mx and his QSO with 2RX was re-broadcast on 2 mx. He announced that he was 4 miles south of Twofold Bay and we checked him at 365 miles on the map. The night was hot, humid, a mild N.E. wind blowing. At 2000 hrs. he transmitted on 144.66 Mc. on tone and said he would tune the 2 mx band for reports. 2HE gave him 5 and 5, later altered to 5 and 8. Jim gave 2HE 5 and 9 plus. From 2000 to 2215 Jim worked 15 Sydney stations at a minimum report of R4, S5. Jim then picked up the gear, 4 el. beam, 10w. to QQE03/12, cascade converter to Command rx, and returned to the hotel at Eden, a very happy man.

It has yet to be decided who of the 15 Sydney stations was the furthest from 2PM/P, the bloke at Killara or Kevin 2ZFC at Epping.

This first of the over-water tests now puts N.S.W. in the picture with Victoria where they accomplish long distances owing to the general flatness of the country. We here have been wasting our time trying to work from mountain tops and over the Blue Mountains out of Sydney. The next obvious step is to arrange tests with VK7 and I understand that 2RX has already discussed this during the opening to VK7 recently.—2HE.

VICTORIA

The month of Jan. was somewhat up and down with regard to 144 Mc. activity in Ballarat and to the west. On the 10th there was a good break through to VK7, 7LZ and 7PF being contacted. Gippsland stations have also been coming through and George 3ZCQ has been worked from here. Jim 3SV at Castlemaine has been active working into Melb. and Ballarat, 3ZEJ holding up the Ballarat end. Jan. 30 there was another opening to VK7 when 3ZEJ contacted 7LZ. Reg 3ZFD (Horsham) is red-faced about the night a few weeks ago when he was called by several Melb. stations after he had signed with 3ZBS. Reg replied all right, or rather he pushed the switch and talked only to discover that he had switched off the a.c. to the tx. By the time he had discovered this, switched on and allowed for the warm-up, the Melb. gang had given him away as having a "crook" converter.

Finally this month, a little "winge". Why is it that we see no notes about 144 Mc activity in Melb.? The answer is obvious, there isn't any sent in. What about some news from the Big Smoke"—3ZEJ

SOUTH AUSTRALIA

144 Mc. activity is increasing in VK5. Doug 5KK worked Bill 5ZAX/P, Maitland, S9 both ways, but the path seems to be difficult as the 50 Mc. sigs are more consistent. Perhaps more monitoring of this band would produce some results. Barry 5ZBZ has just finished a tx with 6 mA. drive to 20w., is now working on his converter. Neil 5ZDH has a tx going and works cross-band to 50 Mc. with Keith 5MT. Keith reports all his gear working on 2 mx including a 12 el. collinear above the 50 Mc. Tilton. Mick 5ZDR is building a converter and Geo 5ZGA has added a 6AK5 r.f. stage to his. 5ZAW has again fixed up the 829B and blown the dust off his rx, 6J6 p.p. r.f., push-push 6J6 mixer, also has a new xtal locked cascode coming up. Curl 5ZBL is active and has been heard trying to contact Wally 6WG.—5ZAW

TASMANIA

Band open to VK3 on Jan. 2, 3, 5, 7, 10, 11, 30. On the 7th, 7LZ and 7PF worked 3ZAT (Maffra) and 3ZCG/3 at Shepparton. The first

(Continued on Page 23)

CORRESPONDENCE

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the publishers.

COMPLIMENT TO JOHN MOYLE

Editor "A.R.," Dear Sir,

May I introduce myself as a fellow Radio Amateur in the United States (W4CXA) interested in the attitudes and feelings of other Amateurs regarding their hobby. I had the opportunity to attend most of the recent I.T.U. Administrative Radio Conference in Geneva, Switzerland, on behalf of our broadcasting industry in this country. While there I was privileged to meet and become well acquainted with one of your countrymen, Mr. John Moyle, VK3JU.

I am told that there are quite a few Australian Amateurs who have some doubt as to the wisdom or value of sending Mr Moyle to Geneva to represent the Australian Amateurs. I am familiar with the situation in Australia prior to the Conference pertaining to the position of the Australian Government in respect to Amateur allocations. Certainly his work at that time, in bringing to light a situation not entirely in keeping with proper procedure, would commend him to most Amateurs who value our frequencies. I don't mind saying that it came as quite a shock to the American Amateurs when we learned of the Australian proposals for reducing the Amateur allocations at Geneva. I am not overlooking at all the fact that the effectiveness of any Amateur organisation or representative is considerably diminished unless the official position of the Government of the country incorporates the considered judgment and feelings of those licensed in the Service. Because the Australian position regarding Amateurs was put forward, it was even more important that Mr. Moyle be on hand at Geneva.

The official record of the Conference will not reflect the tremendous impact and influence that John Moyle had on delegates, not only Australian, but those from other countries as well. John's friendly discussions, clear explanations of the true meaning of Amateur Radio, and his knowledge of the problems of the other services had a great deal to do with the outcome, in my opinion, of the Amateur Radio allocation negotiations at this Conference. No one can say, of course, that had it not been for John the Australian proposal to reduce our 14 Mc. band would have been favorably considered by the Conference. I do believe, however, that John's work with his delegation and others, had considerable influence on the outcome. My personal knowledge of his work there and my high esteem for him as an individual and true Amateur prompted me to write this letter. I sincerely hope that the Australian Amateurs will reassess their thinking on this subject, and consider themselves lucky to have an individual of the calibre of John Moyle as their representative in Geneva. That he did such a fine job under trying physical conditions is a high tribute to his devotion to the purpose of his assignment.

My most cordial regards and best wishes to all my friends in your country.

—A. Prose Walker, W4XCA-W2BMX.

VHF

(Continued from Page 21)

time stations have been worked in this area of VK3 from VK7. Maybe the band is open to other districts than Melb. at times as Melb. stations were absent on this occasion. The 10th was quite a night. 7ZAK went portable to Mt Wellington and was putting a good sig into Launceston. The VK3 then broke through and two or three had their first VK7 QSO. 7ZAK managed to work three VK3s, this path being over the Western Tiers, 3,500 ft. high, which would take the end edge of being 4,000 ft. up. The distance would be about 380 miles. VK7 stations operating that night were 7BQ, 7LZ, 7PF at Launceston, 7ZAA Burnie, 7RL Stanley and 7KAK/7 Mt. Wellington. A weak opening on the 30th produced only 3 or 4 VK3 contacts due to QSB. Of interest is the report that from 2130 on Feb. 3, a t.v. viewer at Launceston had another t.v. station besides HSV7 on his t.v. set. He swung the beam but was unable to peak the direction. A few days earlier sigs from Mt. Lofty were being received here at good strength on 120 Mc. Maybe the t.v. signal was from VK5.

288 MEGACYCLES

TASMANIA

Well, all the trouble Col 7LZ has gone to with his gear has paid off. On Jan. 7, after QSOs with 3ZAT and 3GCG/3 on 144 Mc. several times, 288 Mc. tests were carried out. 3ZAT gave up but George 3ZCG/3 listened for 7LZ again at 2300 and heard Col at R5 S8. Col was unable to read George due to the low pawer he was using, so when 144 Mc. packed up the attempt was abandoned for the night. Now that it was known that Bass Strait was no barrier, it was easy for 7LZ and 3ALZ to have a R5 S9 on peaks QSO over the 380-mile path at 2225 on Jan. 10.—7PF.

GENERAL NEWS

VICTORIA

The V.h.f. Group meeting on Jan. 20 was mostly devoted to a discussion on contests and some interesting items were discussed. It was decided to conduct two new contests, one for 144 Mc. enthusiasts, the other for the 6 mx DX gang. The first one is to encourage activity on 144 Mc. and above, to take place during Feb.-Mar. period for one month, a contest to work the greatest number of stations on 144, 288, 576 and above. Stations participating exchange numbers according to the Ross Hull rules. You may work any one station on any one band only once in 24 hours. Generally the rules applying to other contests will apply. For each contact up to 100 miles, one point is scored, for each 50 miles thereafter another point is scored, i.e. 100 miles, 1 pt.; 150 miles, 2 points; 200 miles, 3 pts., and so on. The winner, the station with the highest total points over the contest period.

The second contest is for 50 Mc. operators anywhere who can supply proof of having worked at least one 50 Mc. station in all of the Federal Electorates in Victoria. A special certificate will be awarded to any operator who can manage this feat. This should be of special interest to interstate operators and other DX enthusiasts around VK and perhaps overseas. The contest is open to anyone who works on 6 mx, so who is going to be first?

The VK3 Group hope that other Divisions will follow and organise contests for v.h.f. operators and that it will encourage Amateurs in areas not having v.h.f. representation to come on down to 50 and 144 Mc. and help others to make the grade. Other contests are being planned and it is hoped to have details soon of some regular and some novel awards from VK3.—3ZGF.

QUEENSLAND

Firstly congrats. to Ian 3ALZ and Col 7LZ for the 288 Mc effort. Max 4HD has made 100 v.h.f. contacts with Fumi JA1ABQ/JA0. Good work, anyone else with similar I wonder. Sundry VK3 should make sure the band is not open to anywhere before they hold "hate sessions" on 50 Mc., we are not all "mugs" on 6 mx you know. I refer to Jan. 12 from 1540 to 1615 hrs. You blokes could've worked some reasonable DX had you investigated. Len 4ZBS made QSO number one on Jan. 10, but wasn't copying me. Welcome back on 6 to Jack 4JO.—4ZBL.

SOUTH AUSTRALIA

Al 5ZCR has a new 6 el. Yagi up 50 ft. and reports all sigs up three S points, must be after those weak JAs Al. New calls on the band, father and son combination, Jos 5ZCP and Barry 5ZDL. Another new call on 6 is Garry 5ZFM, located at Plympton, running an 832 in the final, excellent signal, too. I understand that an 829B will soon be in use. Curl 5ZBL has a 30 ft. tower coming up. Just the matter of erection and 2 inch water pipe up through the centre when his XYL has picked the last of the cabbages.—5ZAW.

DX

(Continued from Page 18)

QSLs RECEIVED

2AMB CN2BK, CR7IZ, FB8XX, GC2FZC, VR5AC, VS4BA

2QL: VP2SW, ZL3DA (Chatham), EA9IA, ZS7M, T12WD, CR6BX, CR7IZ, SM5WN/LA/P, LA3SG/P, UO5AA.

2ZR: 100 cards for month.

COMMENTS

This is what some of our DXers say.

2AGH: "I have been informed that the proposed W4BPD to Africa and the Middle East has been postponed until later in the year. VK4IA operated from Willis Island during 1955 and 1956; he had only three contacts east of the International date line but many to VK and ZL. HCCC8 is operating from Galapagos." (VK4IA is not active now, but it is said VK3KB may be able to help with a QSL) 2AGH worked five new countries to bring his total to 248.

3AOM "I have found conditions a good deal better, as far as 20 mx were concerned. One or two very interesting contacts were made, representing new countries for me. These were VU2ANI, operating in the Andaman Is., and ZM7DA (our old friend VR2DA gone walkabout)." 4SS please note.

My thanks also go to 2AMB, 2QL, 3ACN, 4DO, 4SS, L3022, L3001, L3055, L3072 for help with these notes.

L3030 and L3031 have contributed for the first time and I hope to hear from them each month. Please give your names next time.

2AQJ found holidays cut into his DXing and when he did get back from VK5 the heat kept him off the air. Hope you get that 150N QSL.

L3074 got among the 50 Mc. sigs; he heard 164 for the month. BERS-198, pleased you got those two new ones; Eric has 283 heard and 248 confirmed. L3065. Good work, Ian, 22 new countries for the month is good going; you will soon have the 100 up.

Reports on band conditions this month have been very conflicting; some say the bands are the worst for this time of the year for a long time, while others think they are improving. In my case I found them good—worked 53 countries and had 279 DX contacts. Perhaps being on holidays for the whole month and not going away did the trick.

DX contests and DXpeditions caused very keen competition among the DX fraternity and at times it seemed as though some were getting a little heated under the collar. For example, a W6 and a VK who were not doing so well in the dog fight over HC8JU, earned brickbats for their 37 minutes QSO right on his frequency.

Thanks for the support and 73 for now, John VK2ZR.

AMATEUR CALL SIGNS

AMENDMENTS FOR SEPT.-OCT. 1959

NEW CALL SIGNS

VK—

New South Wales

3DE—D. F Evans, Ambulance Station, Gundagai.
2DS—A. D. Freeman, Leonard St., Inverell.
2GU—P. G. Arthurs, 76 Liverpool Rd., Summer Hill.
2KM—K. C. Mattel, 18 Albany St., Coffs Harbour
2LM—L. M. Wilson, "Corran," Shelley Beach, Port Macquarie.
2VO—V. Molesworth, 8 Jersey Rd., Woolahra.
2YQ—W. J. Hart (Dr.), 4/83 Muston St., Mosman.
2AIY—P B. Barry, 22 High St., Cessnock.
2ATL—L. G. Perrett, O.T.C.A. Receiving Centre, Clyde Rd., Bringelly.
2AZR—R. E. Read, 46 Knowles Ave., Bondi North.
2ZCS—A W Sullivan, 45 Grantham St., Carlton.
2ZGS—J. J. Sullivan, 13 Brooks St., Newcastle.
2ZHW—D. R. Woodman, 17 Brookong Ave., Wagga.
2ZNC—H. C. Bell, 166 High St., Tenterfield.
2ZWM—W. J Melville, 54 Travers St., Wagga.
2ANN—D. W. Morris, Flat 2, Strone Ave., Wahroonga.

Victoria

3IJ—D. R. Twigg, 6 Kennedy St., Glenroy.
3PC—C. G. Bird, 15 Munro Ave., Edithvale.
3QG—C. K. Blake, Station Henty Highway, 3 miles N.E. of Hopetoun, Postal: Box 152, Hopetoun.
3UV—A. J. Turner, 14 Airlie Ave., East Prahran.
3XK—P. W Hebard, 18 Wembley Ave., Cheltenham.
3XN—B. S. Baulch, "Murraba," Hawkesdale.
3XQ—V. H. Richardson, 70 Devon Rd., Pascoe Vale.
3ZN—J. M McDonnell, 7 East Como Pde., Mentone.
3AUK—R. M. Kidgell, 308 Waverley Rd., Mt. Waverley
3AZM—H. A. McLachlan, 591 Heatherton Rd., Dandenong.
3AZT—D. E. Timms, 140 Kent Rd., Hamilton.
3ZAJ—K. F. Cody, 14 Lincoln Ave., Oakleigh.
3ZCJ—A. W. Beasley, 25 Bishop St., Footscray West.
3ZIF—G. F. Scott, 22 Eastview Cres., East Bentleigh.
3ZIH—R. S. Hernan, 54 Lascelles St., Coburg.
3ZIW—R. C. Whitaker, 58 Vincent St., Sandringham.
3ZJA—J. D. Anwin, 3 May St., Deepdene.
3ZJB—B. H. Baker, 1 Adam St., Bentleigh.
3ZJE—J. R. Edwards, 24 Oswin St., East Kew.
3ZJN—H. L. Jenkins, 19 Rangeview Gr., North Balwyn.
3ZJT—E. M Timms (Mrs.), 140 Kent Rd., Hamilton.
3ZJW—K. B. Webster, 58 Mt. View Pde., Rosanna.

Queensland

4BZ—D. B. Hughes, 66 Balsa St., Inala.
4CS—Northern Command Signals, Amateur Radio Club, Signal Training Depot, Kelvin Grove.
4DX—D. M. Humphreys, 80 Bridgewater St., Morningside.
4KV—R. L. Keogh, 114 Hooper St., Townsville.
4MQ—C. M. King, Taylor St., Belgian Gardens, Townsville.
4QW—C. F. N Wade, 88 Bennett Rd., The Gap, Ashgrove.
4TC—The Townsville Amateur Radio Club, Station: 23 Hughes St., Hermit Park, Townsville; Postal: C/o. A. P Stephenson, 9 Little St., Belgian Gardens, Townsville.
4ZCI—R. D. Sivyer, 26 Jack St., Kedron.
4ZCT—J. C. Grant-Thompson, 43 Flower St., Northgate.
4ZDS—R. D. Sivyer, 26 Jack St., Kedron.
4ZEB—R. E. Borley, 33 Ellis St., South Brisbane

South Australia

5DS—D. R. Skinkfield, 7 Derwent Ave., Rostrevor.
5DY—C. J. Tatum, 24 Short Rd., Elizabeth.
5EW—W R. Edwards, Station, N.T.A. Hostel, Alice Springs, Postal, C/o. C.S.I.R.O., P.O. Box 77, Alice Springs.
5NK—R. J Knight, 30 Waite St., Blackwood.
5QX—L J. Hunt, 10 Northampton Crescent, Elizabeth East.
5WS—F. S. A. Jenkins, 24 Le Hunte St., Wayville.
5ZCI—A. L. Goldfinch, 636 Seaview Rd., Grange.
5ZCY—E. L. Murray, 11 Holden St., Kensington Park.

Western Australia

6BL—A. J. Bale, 14 Durant Way, Brentwood.
6BS—E. Samek, 842 Canning Highway, Applecross.
6GR—G. W. Cattach, South West Highway, Yarloop.
6WO—W. R. Ion, 18 Fletcher St., Applecross.
6ZCO—L. E. Cox, 16 Oxford St., South Perth.

Tasmania

7ZAO—R. K. Emmett, 6 Haig St., Lenah Valley.
7ZBM—G. E. Maxfield, C/o. Hydro Electric Commission, Waddamana.

Territory of Papua and New Guinea

9HP—W. J. Fischer (Rev.), Catholic Mission, Kavieng.

Tasmania

0AB—G. E. L. Burkett, Wilkes.
0BH—N. W. Hanson, Mawson.
0ED—K. C. Oldroyd, Davis.
0GE—I. G. Bird, Mawson.
0WH—H. L. Wright, Macquarie.

CHANGES OF ADDRESS

VK—

New South Wales

2NV—J. V. Smith, 5 Wrights Ave., Marrickville.
2RL—A. R. Litchfield, 100 Avalon Pde., Avalon Beach.
2AEA—R. W. Allison (Dr.), 96 Wardell Rd., Dulwich Hill.
2AOV—T. W. Stewart, 10 Culey Ave., Cooma.
2ARQ—A. A. Rayner, 39 McGowen Cres., Liverpool.
2ATH—T. L. Hooper, 24 Water St., Wahroonga.
2ATX—I. E. Huser, 9 Arnold St., Killara.
2ATY—R. W. Best, 27 The Strand, Boronia Park, Gladesville.
2AZE—G. R. Stewart, Lot 55, 213 Prince Charles Pde., Kurnell.
2AZO—C. Thornthwaite, 33 Myee Cres., Lane Cove.
2AZW—W. B. Walley, 87 Darling St., Dubbo.

Victoria

3DD—L. J. Meadows, 6 Dickens St., Hamilton.
3JK—J. K. Herd, Portable, Shelbourne Court, Mornington.
3QL—S. H. Le Breton, Post Office Quarters, Seymour.
3VL—R. M. Churchward. Station: C/o. V. Honey, Katunga; Postal: P.O. Box 73, Numurkah.
3AAN—J. G. Nicholson, 28 William St., Glenroy.
3ADJ—D. J Harkin, 4 Ethel St., Thornbury.
3ANJ—L. E. Lawless, 32 Malcolm St., Blackburn.
3AOP—G. R. Burrowes, 7 Heather St., North Geelong.
3AWQ—W. Reilly, Police Station, Warrnambool.
3ZAU—H. S. Lilburn, 3 Through Rd., Ringwood.
3ZCW—M. A. White, Fuller St., Ouyen.
3ZEW—L. T. White, 56 Menin Rd., Forrest Hill.
3ZQC—W. R. Badrock, Flat 16, 603 High St., Armadale.

Queensland

4BM—W. J. Mead, 8 Cross St., Mitchelton.
4DM—R. J. S. Davis, 121 Francis St., West End, Townsville.
4XM—W. A. McDivitt, 49 Jones St., Auchenflower.
4YW—G. Whitehead, 30 Hirshfield St., Zillmere North.

South Australia

5AP—H. R. Hodgson, 19 Anstey St., Port Augusta.
5KI—K. Postler, Hilltop Ave., Teatree Gully.
5KQ—E. T. Park, 46 Cashel St., St. Marys.
5WD—R. A. Warner, 7 Hanson St., Adelaide.
5ZCC—R. V Lapidge, 51 Norseman Ave., Cottonville.

Western Australia

6AD—A. W. Stewart, 49 Wiluna St., Mt. Lawley.
6FM—R. H. Mould, 23 Gibson St., Mt. Pleasant.
6ZAZ—C. G. Andrews, 47 Canterbury Ter., East Victoria Park.
6ZBF—R. L. Holman, 39 Lyons St., North Cottesloe.

Tasmania

7AR—A. Doodson, Station, Airport Village, Western Junction; Postal, C/o. D.C.A. Free Bag, Launceston.
7MZ—H. W. Hancock, 2 Stephen St., East Devonport.

Territory of Papua and New Guinea

9RM—R. H. Murphy, The Hill, Goroka North.
9YT—Carl Zimmer (Fr.), Lamekot, P.O. Kavieng.

CANCELLED CALL SIGNS

VK—

New South Wales

2GR—K. C. Mattel (now VK2KM).
2AKN—G. C. T. Morrison.
2ALM—L. M. Wilson (now VK2LM).
2ASI J. J. Sullivan.
2AXW—C. F. N. Wade (now VK4QW).
2AZM—J D. Molle.
2ZCJ—C. J. Charman.
2ZCT—J. C. Grant-Thompson (now VK4ZCT).
2ZDD—V. Molesworth (now VK2VO).
2ZDQ/T—D. A. Meadowcroft.
2ZEB—R. E. Birley
2ZJH—W J Hart (now VK2YQ).
2ZPM—D. R. Stokes.

Victoria

3BC—B. D. Cooper.
3OI—R. J. Collins.
3UI—M. A. Rodger.
3ZX—I J Hunt (now VK5QX).
3AIS—E. Samek (now VK6ES).
3AKS—E. A. King-Smith.
3AMG—C. W. Meech.
3AQL—C. W. Harwood.
3ZCC—N. R. Kay.
3ZCL—C. K. Blake (now VK3QG).
3ZCQ—B. S. Baulch (now VK3XN).

Queensland

4DT—D. A Fryer
4LZ—L. A Griffiths.
4XH—H. A. Perkins.
4ZBD—D. B. Hughes (now VK4BZ).

South Australia

5MQ—R. E. Read (now VK2AZR)
5QL—J. L. Weatherly

Western Australia

6ZBM—G. E. Maxfield (now VK7ZBM).
6ZBT—G. W. Cattach (now VK6GR).

Tasmania

7AJ—A. W. Johnson.
7AO—R. K. Emmett.
7ZAM—J. R. Milway.

Territory of Papua and New Guinea

9EP—E. P Black.
9BW—W. H. Holland.

FEDERAL

Fed. President: G. M. Hull, VK3ZS.
Fed. Assist. Secretary: W Mitchell, VK3UM, Box 2611W, G.P.O., Melbourne, C.1, Vic.
Federal Councillors:
New South Wales—Bob Godsall, VK2ARG.
Victoria—Alan Elliott, VK3AEL.
Queensland—Arthur Walz, VK4AW
South Australia—L. H. Duncan, VK5AX.
Western Australia—Ron Hugo, VK6KW.
Tasmania—E. J Cruise, VK7EJ
Papua-New Guinea—Russ Coleston, VK9XK.
Fed. Contest Committee Alex Hubbard, VK-7AX, Manager, Box 371B, Hobart, Tas.
QSL Bureau. R. E. Jones, VK3RJ, 23 Landale Street, Box Hill, E.11, Vic.
Awards Manager: A. G. Weynton, VK3XU, 5 York Street, Bonbeach, Vic.

NEW SOUTH WALES

President: Dave Duff, VK2EO.
Secretary: Norm Beard, VK2ALJ. Address mail to Rooms at 14 Aitcheson Street, St. Leonards, N.S.W.
Meeting Night: Fourth Friday of each month at Science House, Gloucester Street, Sydney
QSL Bureau, 14 Aitcheson Street, St. Leonards. Frank Hine, VK2QL, Manager; assisted by Allan Smith, VK2AIR.
Zone Correspondents: North Coast and Tablelands: Noel Hanson, VK2AHH, Ryan Ave., West Kempsey; Hunter Branch: R. W. Rose, VK2AQR, 17 Brooks St., West Wallsend; Coalfields and Lakes: H. Hawkins, VK-2YL, 9 Comfort Av., Cessnock; Western: W. Stitt, VK2WH, "Cambijown," Forbes; South Coast & Southern: E. Fisher, VK2DY, 2 Oxlade St., Warrawong; 8th. Western: J. W. S. Edge, VK2AJO, Wallace St., Coolamon; Tamworth: E. Smith, VK2APS, 60 Upper St., Tamworth.

VICTORIA

President: D. A. Wardlaw, VK3ADW.
Secretary: J. R. Lancaster, VK3JL.

NOTES

Administrative Secretary Mrs. Trainor, 478 Victoria Parade, East Melbourne, C.2. Postal address: P.O. Box 36, East Melbourne, C.2.
Meeting Night: First Wednesday of each month at the Radio School, Royal Melbourne Technical College.
QSL Bureau Inwards and Outwards—W.I.A., Vic. Div., P.O. Box 36, East Melbourne, C.2.
Zone Correspondents. Western W. J. Kinsella, VK3AKW, Magdala, Lubeck; South Western: W. Wines, 48 Cranley St., Warrnambool; Far North Western: M. Folie, VK3GZ, 101 Lemon Ave., Mildura; Midlands: R. Jonasson, VK-3ND, Farnsworth St., Castlemaine; North Eastern: T. K. Tennant, Park St., Tatura; Eastern: W. G. Francis, VK3ZCG, 30 Windsor Ave., Moe.

QUEENSLAND

President: D. B. Hughes, VK4BZ.
Secretary: J. F. Wood, VK4VB, Box 638J, G.P.O., Brisbane.
Meeting Night: Fourth Friday in each month at the State Service Union Rooms, Elizabeth Street, Brisbane.
Divisional Sub-Editor: W. J. Rafter, VK4PR, Willandra St., Alderley, Brisbane.
QSL Bureau: Jack Files, VK4JF, Vanda St., Buranda.
Zone Correspondents: Maryborough: R. J. Glassop, VK4BG, 80 North St., Maryborough; Townsville: R. K. Wilson, VK4RW, Hogan St., Stuart, Townsville.

SOUTH AUSTRALIA

President, B. W Austin, VK5CA.
Secretary: J. C. Haseldine, VK5JC, Box 1234K, G.P.O., Adelaide. Telephone: M 7651.
Meeting Night. Second Tuesday of each month at 17 Waymouth St., Adelaide
Divisional Sub Editor W. W Parsons, VK5PS, 19 Victoria Ave., Rose Park, S.A.
QSL Bureau: G. Luxton VK5RX, 27 Belair Rd., West Mitcham, S.A. (Inwards & Outwards)

WESTERN AUSTRALIA

President: L. Roeger, VK6HR.
Secretary: L. S. Eddington, VK6LS, Box N1002, G.P.O., Perth, W.A
Meeting Night: Third Tuesday of month at Perth Tech. College Annexe, Mounts Bay Rd.
Divisional Sub-Editor C. E. J Sangster, VK6CS, Windsor Hotel, South Perth.
QSL Bureau Jim Rumble, VK6RU, Box F319, G.P.O., Perth, W.A. (Inwards and Outwards).

TASMANIA

President: Mr. L. R. Jensen, VK7LJ.
Secretary: K. E. Millin, VK7KA, Box 371B, G.P.O., Hobart.
Meeting Night: First Wednesday of each month at W.I.A. Clubroom, 147 Liverpool St., Hobart.
Divisional Sub-Editor, L. Nichols, VK7ZZ, 9 Cressy St., New Town.
QSL Bureau: J. Batchler, VK7JB, 39 Willowdene Ave., Lower Sandy Bay, Hobart.
Zone Correspondent: North Western Zone—Terry Tongs, VK7TT. Northern Zone—Ray [redacted]

PAPUA—NEW GUINEA

President: D. Brown, VK9SB.
Secretary. Roy Taylor, VK9AU, P.O. Box 204, Port Moresby.
Meeting Night: Last Wednesday in each month, R.S.L. Reading Rooms, Ela Beach, P. Moresby.
QSL Bureau: C/o. P.O. Box 204, Port Moresby.

FEDERAL

GENEVA CONFERENCE

On the evening of 4th Feb., 1960, I attended the usual F.E. meeting, and it was at this meeting that some of the tabulated discussions were presented. I was amazed at the amount of papers which had been forwarded to us for perusal and even these few, which, when stacked on top of each other, would reach a height of approx. four feet, are only part, and a very small part, of the whole proceedings.

We, who have not had the experience of attending a conference such as this, fail to realise the magnitude of work involved in the preparation of such records and this work is doubled when thousands of pages of printed recordings are rendered obsolete daily, and have to be destroyed.

In addition to the printed records, I had the pleasure of looking through the longhand notes made by our representative, John Moyle. These notes, closely written in longhand on foolscap paper, total scores and scores of pages.

John made these copies at night from rough notes taken during the sessions.

It is intended that the printed records of the proceedings be tabulated and filed, and together with those handwritten notes, held for posterity

AMERICAN CALL BOOKS

The following issues of the American Call Book are available to members at the price listed:

Winter 1955 (2 copies), 10/- each
Spring 1956 (1 copy), 10/-
Fall 1957 (1 copy), 15/-
Spring 1957 (1 copy), 15/-
Winter 1957-58 (1 copy), £1
Summer 1958 (1 copy), £1.

Any of the above books may be had by applying to: B. Boase, 65a Franklin Street, Melbourne, Vic., post paid.

FEDERAL COUNCILLORS

Mr. L. H. Duncan, VK5AX, 16 King Street, Gawler, S.A., has been appointed Federal Councillor for the VK5 Division; vice Mr. Rex Richards, VK5DO.

We of the Federal Executive wish to take this opportunity to pass to Rex Richards our thanks for his co-operation and the sterling job he has done in this appointment over the past years. Thanks Rex and our best wishes go with you for the future.

T.V.I.

Recently numerous reports have been received that Interstate t.v. ABC2 (Channel 2 in particular) has been received in Melbourne.

As these openings are of particular interest Federal Executive would like a report on all such openings. All such reports should be forwarded direct to: David Rankin, VK3QV, V.h.f. Manager.

[redacted]

The proposed Federal Convention to be held in Melbourne at Easter has been voted out by a majority decision.

Federal Councillors have been requested to notify their Divisions that the Convention will not be held.

V.H.F. CENTENARY AWARD

Federal Executive would like to pass on their thanks to all who submitted constructive criticism on the proposed V.h.f. Centenary Award recently published in "A.R."

The comments received are at present being collated and when completed, further details will be published in "A.R."

In order to finalise this aspect, F.E. would like further comments, these to reach F.E. no later than 31st March, 1960.

MAWSON

Flying Officer Norm Hanson has taken out the call VK0BT under which he will operate at Mawson.

Norm has had a varied experience with Amateur Radio and has operated as one could say from extreme to extreme, as prior to the trip south, he had been in Malaya and had operated from there.

FEDERAL AWARDS

Applicants for DXCC who already have credit for Gold Coast (ZD4) may not submit Ghana (9G) for credit as these two are considered to be the same country. Additional credit cannot be given due to change of name where there is no territorial change.

Applicants are asked to note, however, that Conakry—Republic of Guinea (7G) is considered to be a new country, inasmuch that it is a sub-division of the large territory known as French West Africa and a very large portion of the original territory still exists. Credit can still be given for contacts within the area.

New applicants for DXCC are asked to note that at this date Certificates cannot be issued as supplies are exhausted. Credit can, however, still be given.

AMENDMENTS TO DXCC COUNTRIES LIST

Add to the list published in the January issue of "A.R.":

VQ8—Cargados Carajos Shoals ... ... (39)
VK4—Willis Island ... ... (39)

Remove from the same list the following:
II—Trieste.
[redacted]

G. Weynton, VK3XU, Awards Manager.

— . . . —

SILENT KEY

It is with deep regret that we record the passing of:—

VK4AP—Alf Guilford.

FEDERAL QSL BUREAU

The new address for the Denmark QSL Bureau is: E.D.R. QSL Bureau, Ingstrup, Denmark

Jack Files, VK4JF, Inward QSL Manager for the VK4 Division, advises that his attempts to locate Russell Clarke, VK4IC, ex-VK3AGA, have so far been unsuccessful. VK4IC is in great demand since Willis Island was classified as a separate country by the A.R.R.L. However, mail sent to VK4IC's last known address has not been returned.

The Central High School Radio Club, 1212 Nebraska St., Sioux City, Iowa, advise that during the 1960 A.R.R.L. DX Contest they will operate station W0LNI/0 from South Dakota on c.w. in the 14 and 21 Mc bands on week-ends Feb. 19-21 and March 18-20.

John Kaarsberg, VS1JW, who hails from Toowoomba, is active with a 35 watt Geloso on 14 c.w. and phone seeking mainly VK contacts. QSLs are assured, if sent direct to John at 32 Chartwell Drive, Serangoon Garden Estate, Singapore.

OA4KF has been active since June 1959. Prior to his call, the operator, Evert Kaleveld, operated for 11 years as PA0XE and for two years as OA7I. Often heard on 14 Mc. c.w and QSLs guaranteed via Box 538, Lima, Peru.

Ivan Thomas, VK0IT, one of the 1960 Macquarie Island team, claims that the locally manufactured product is vastly superior to "Vic" during the consumption stage, but cannot account for the delayed action and the concertina head effect noticeable on succeeding days.

Len Collett, KZ5LC, Box 736, Balboa, C.Z., now firmly planted in that area, previously held the call signs W0DEA in Missouri and KG6DEA in Guam. Len claims he owes his

continued existence to the prompt and effective action of a "digger" at Guadalcanal during W.W.II. This prompts his eager participation in VK-ZL contests and his offer to do the honors for any VK or ZL who passes his way. Please feel free to contact Len by telephone at his office QTH, Balboa 2-3376, or at home 84-2106. This scribe will probably be your first customer Len.

1958 issues of "CQ" almost complete are for disposal from this Bureau.

Writer is seeking a suitable "locum" for the period August 1960 to January 1961 inclusive. The remuneration paid in any currency desired is NIL, although it is rumoured that it is to be doubled shortly

Al Scarlett, W3CC, known to many VKs and ZLs for 30 years for his prodigous skeds with natives of these countries, is having surgery on both legs this month to have varicose veins cut and tied. The surgery isn't worrying Al, but the surgeon's edict that he must not climb stairs for several weeks following the operation has him in a bit of a knot. His shack is in the basement and he wants to know how he can get upstairs again.

Your Federal QSL Manager is celebrating his imminent retirement from the biggest business organisation in the Commonwealth, after 46 years of toil and shift duty, by treating his spouse and himself to a short run around the globe, by sea, commencing August next. Outward journey touches at Sydney, Wellington, Tahiti, C.Z., Miami, New York, Bermuda and Great Britain. A stop-over of three weeks is being made in the Eastern side of U.S.A. After a short European tour and a month doing Great Britain and Northern Ireland, they propose to hibernate in London during December. Homeward run in January is via Suez, Colombo and Singapore. A few old timers will be visited when opportunity permits. Is reconciled to spending balance of days in the poor house on return.

—Ray Jones, VK3RJ, Manager.

— . . . —

NEW SOUTH WALES

The monthly meeting of the N.S.W. Division was held at Science House, Gloucester St., Sydney, on 22nd January, 1960, with an attendance of some 30 members and seven visitors being present. The President, Dave 2EO, took the chair and welcomed the members and visitors present, particularly welcoming the attendance of Frank Pearson, VK2ACQ/P from Narrabeen, and Peter Roper, G3MII, from Southend-on-Sea, whose ship happened to be in port at this time.

The minutes of the previous meeting were dealt with by the Secretary, Norm 2ALJ, and following a short discussion apologies were received from VKs 2OT, 2ZEL and 2AGH. New members were admitted and amounted to 11, making our total membership for the year ending at 1,143, consisting of 19 life members, 723 full members, and 401 associates.

In dealing with the correspondence, it was realised the importance of the N.S.W. Division A.O.C.P. Correspondence Course, for which there are many enquiries from all over Australia.

Dave 2EO introduced the lecturer for the evening, Peter Griffin, who titled his fine and informative lecture, "Navigational Aids at Kingsford-Smith Aerodrome," and proceeded to detail the aids to navigation which have been used in the past, those in use today, and some which are projected. Non-directional beacons which operate on 201-400 Kc., distance measuring equipment operating on 206 Mc., visual aural range showing in detail the use of the four courses and operating on 108-112 Mc., instrument landing system, localisers and glide path controls were all dealt with most effectively, and Peter took great pains to show how the various antenna systems used were designed and fed. Dealing with a future system, he detailed the merits of the newer decca system, and in fact showed us how these aids, some of which are entirely the product of Australian engineers, assist the authorities to keep the Australian air lanes so safe, despite the tremendous amount of traffic they carry each day. One important factor of these aids was discussed, the saving of time in handling the giant airliners, which consume so much fuel at lower altitudes and pointing out that a saving of eight minutes on a flight between Sydney and Melbourne would represent some 10 per cent. of the flying time over the route.

Following a large number of questions, which indicated the interest taken in this lecture, a vote of thanks was tendered to the lecturer by Bill 2YB.

On resuming the chair, Dave announced that the Institute members of the Advisory Committee were to be elected, the three who held this office last year were re-elected; these members being Leo McMahon, VK2AC; Graham Hall, VK2AGH, and Lyle Woolnough, VK3GW.

Members were reminded that subscriptions would have been due in February, and all desirous of meeting their obligations in this regard should contact the Secretary, 2ALJ, Box 1734, G.P.O., Sydney.

Joe 2JR showed a photostat which he has had done of the report on the foundation meeting of this Division and which took place on 11/3/1910, and presented this framed copy to the President so that it can be hung in the new administrative building the Division has acquired at 14 Altcheson St., St. Leonards. The building is now under our control and we welcome visitors. Leave the train at St. Leonards station and walk up the hill some 100 yards, turn the corner at the hotel and take the first street on the right. Our new headquarters are some 50 yards on the left hand side. The uses of this building will be many and of great benefit to the Division, and among other activities projected are the A.O.C.P. classes which commenced in February.

The meeting closed at 10.20 p.m. and members and visitors adjourned for coffee and ragchew.

N.S.W. DIVISION NEW HEADQUARTERS

It will be, by now, common knowledge that the N.S.W. Division has acquired premises which are to be used as an administrative centre and also to house the many smaller meetings of the various groups within the Division. The new premises will also provide room to conduct the A.O.C.P. course.

The night of 4th Feb. saw the first meeting held in the new location, it was a special meeting called with the purpose of laying down the policies necessary in the running of the venture. The meeting was attended by VKs 2OT, 2ACD, 2CB, 2MP, 2ALJ, 2ZTM, with the President, 2EO, in the chair. Among other items discussed, it was decided that the registered address of the Division be 14 Altcheson Street, St. Leonards, and it is requested that in future that all mail be suitably addressed so that mail can be dealt with speedily. The Box 1734 G.P.O., Sydney, will, however, be retained for some time until all our many sources of mail have been circularised.

As from the 2/3/60 the A.O.C.P. classes are being held at the above address which will accommodate many prospective Amateurs.

For those who are doubtful of the location, it is within three minutes of St. Leonards station, which is in turn within 15 minutes of Wynyard station. On leaving the station, proceed 100 yards up the Pacific Highway to the hotel, thence Altcheson Street branches off to the right at an angle, and number 14 is immediately facing the large service station. Visitors will be very welcome.

[illegible]

If there are such things as hen's teeth, well news this month is just as scarce as that. There was no meeting last month, but don't forget to roll-up in force for the Annual Meeting on Friday, March 11, at the University of New South Wales, Tighes Hill, at 8 p.m. Unfortunately, I expect to be in VK3 about that time so if anyone can think up a new correspondent it would be appreciated by yours truly as a change is always for the better.

Bob 2AFP was a visitor to 2ZL and 2AQR's shacks recently leaving a trail of rutile sands in his wake. Ivan 2AIM spent the week-end at Zulu-Lulu's and gave AQR a hiding at billiards. Bill is importing them now. Stepping over the Hunter border for a moment, I note that the Terrigal Tripe Tampan has discovered an effective method of combating t.v.i. has a list of viewing times of the complainant.

They tell me that Stan 2ZDL is now using his new call sign of 2AYL. The usual strong force of Hunter boys invaded the Dural "Do," but showery weather drove many home early. Bill 2XT, for this reason, missed his chance to win a fortune in a quiz. The joke of the night was when the master of ceremonials tried to entice 2AQR to mount the dais and act as one of the judges. Bob took one look at the flimsy structure and gave Max the raspberry. However, a good time was had by all and no doubt they will be there next year.

—. . . —

VICTORIA

SOUTH WESTERN ZONE

The zone is still active and plenty turn up on the Thursday zone hook-up, but it would be better to see a lot more come on as it is left to the same few all the time. It is great to hear that the Ballarat boys have agreed to have the Convention there. I do hope there will be a good turn up from our zone as the Ballarat boys do a good job.

Harry 3XI is back on the air from his new location, so all the 14 Mc. chaps keep their ears open for Harry and give him a shout.

Ted 3PS and Bill are on regularly on 40 mx on Saturdays and some times through the week, so listen out for them too.

Bill Wines and Ted 3PS have organised a hobbies exhibition in Warrnambool, starting on 13th March, until 19th, and will be on most bands each night from 8 till 9.30 p.m., so chaps give us a few contacts. 3AGE and 3PS will be the call signs.

Nothing heard of the Colac boys, but Vic 3ABX has taken up residence so I hope it won't be long before we hear Vic.

The Zone Convention will be held at Ballarat on Saturday and Sunday, 2nd and 3rd April, 1960. Features include an All-Band Scramble, competitions on 80, 6, 2 and 1 mx, and novelty events. Dinner and accommodation bookings (deposit £1) are to be made to Brian 3ZBS, 17 Daffodil St., Wendouree West, by 25th March.

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QUEENSLAND

BRISBANE AND DISTRICT

Things always seem to be very quiet at the beginning of the year and activity on the bands hasn't been anything to write home about. As usual, 21 Mc. seems to be "the band" and Europeans just roll in at around 10 p.m., which is around "lunch time GMT" when the boys over there use a bit of their lunch break for DX.

Activity from Brisbane is low and if it was not for the few regulars like Frank 4ZM, Del 4RJ, Harry 4HA and a few others there would be no activity at all. Harry 4HA will be off the air for a few months as he is on his way to England aboard the "Fairsky" as you read this. He has been in Australia for over 50 years and is going to England to see his mother who is still alive and who lives in London. Do you know, he has brothers in dear old London town whom he has never met. Look for him on 20 and 15 mx because he will be visiting a lot of the gang in London.

Disposals gear has been rolling in and you have probably received the first list in "QTC." The tubes are all new and we had them shipped up from VK; at the price, they are a wonderful bargain. The rest of the gear is in near-new condition and be sure you don't delay when more lists appear in "QTC" because you will only have yourself to blame if you don't get in for your share.

Those of you who knew him will know that Ham Radio in VK4 has lost a darned nice bloke with the passing of Alf Gulliford, VK4AP. From relicensing in 1948 until about 1950, Alf could be heard holding his own with DX on the c.w. sections of 20 and 10 mx almost every night and he was one of the exceptionally good c.w. operators in this neck of the woods. He could send at over 30 w.p.m., but would QRS to your speed if you couldn't match his fist. I wish I had a pound for every country he helped me to get back in the immediate post-war period as I only lived a mile or so from him; he must have spent a small fortune calling all the locals on the landline to let them know that there was a "rare 'un" on twenty. Around 1950 he cut down his activity and seemed to fade from the scene, a year or eighteen months ago he made a re-appearance and kept in the thick of DX hunting until he died in January.

I suppose you regulars on 40 mx have been wondering what has been keeping Stan 4SA off the band. Stan had bad luck with the power transformer which supplied his modulator and should be back by the time you read this. He has just spent a few weeks at a north coast beach, with his XYL, having a well earned rest. Jess, his XYL, has recovered after her operation which was done by Dave 4DP.

He will hate me for saying this, but I shrieked with laughter when I saw my pal, Bob 4RW's letter in "A.R." for February about that t.v.i. All I can say, Bob, it was ridiculous for the R.I. up there to even bother about the complaint!

As usual we will be having our Annual Palm Beach Convention over the Queen's Birthday week-end and Council has already started to organise. We can't book the National Fitness Camp at Tallebudgera until three months before the week-end, but I can't see the location of the Convention being changed. This year there is a possibility of having t.v. coverage by one of the three Brisbane channels.

Cheers from 4PR.

TOWNSVILLE

The annual general meeting of the T.A.R.C. held at the residence of 4BX on 26th January was very well attended, although it was quite disappointing to the executive members that

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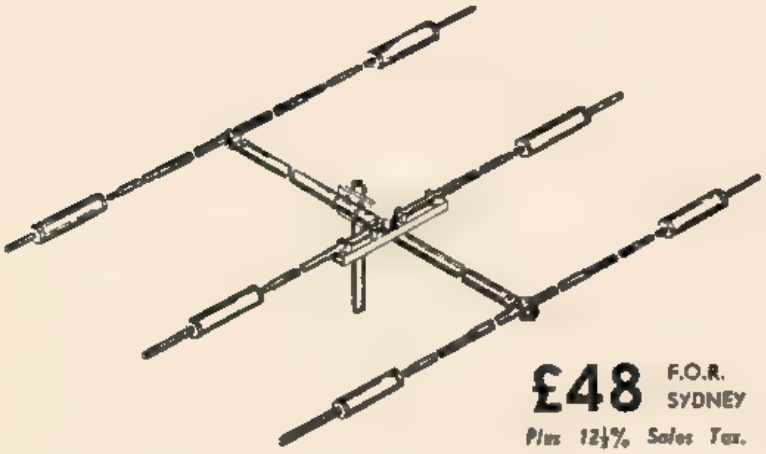

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once again some of the old and valued members did not turn up. Allan 4PS again became President, while the old die-hard, Eddie 4WH, was unable to relinquish the post as Secretary. How about some of you younger members learning the ropes. John 4DD again Technical Officer and Librarian, Graham 4BX was appointed to new post as Educational Officer. Frank 4PF re-appointed Publicity Officer, and Bob 4RW to his usual post as liaison officer between club and W.I.A.

Quite a number of new members were admitted, mainly from the two A.O.C.P. classes held at Ayr and Townsville. The funds of the club showed a substantial decrease, but we are the richer by investing in a technical library. In fact the club is proud to have on the library shelves all outstanding radio publications.

Ted 4EJ and Bob 4RW topped the score of incoming QSL cards. John 4DD and 4RW, the outgoing cards. The number of QSL cards again rose by 356 over the previous year. A careful analysis of the report compiled by the Secretary on same shows that some members are sadly lacking when it comes to returning QSL cards; 930 being received, 657 forwarded.

Bob 4RW spoke on the advantage of making the T.A.R.C. a branch of the W.I.A., seeing that a large majority of the members belong to the W.I.A.. After some fierce opposition, he moved it be discussed at the February meeting and that members give it some very clear thinking in the meantime. Claude 4UX, a member of the T.A.R.C., spoke on the correspondence courses being made available cheaply to clubs by VK2WI. Bob 4RW said he was of the opinion this only applied to branches and clubs belonging to W.I.A. and information on same is being sought. This course would certainly be a boom to chaps who are conducting classes as well as aspiring Amateurs.

Bob 4TK heard on the net explaining how to build a brick incinerator; his slide rule no good at keeping walls plumb. Basil ruining crystals, trying to hit exact frequency on his rubbing off. Harry 4HK on at times drowning out other signals on the band. Alec 4MA made new year resolution to spend more time relaxing on Amateur Radio. Ken 4XD forsaking the beautiful north to reside in VK3; you will be sorry, look at those high temperatures they are having this summer. Claude 4ZY misses Bill 4XM since he was lured south and rarely heard on the band. Arthur 4FZ still weakly heard on the net each Sunday morning. Owen 4OV still keeps the mining town of Mt. Isa on the various skeds with the boys. Claude 4UX returned home after visiting numerous places in the south, being unable to scrounge enough petrol for return trip. Cut out 20 miles from Charters Towers. Just as well portable gear was available, for he was able to raise Vern 4LK to help out.

The Z boys are having a very lean time at the end of contest, no opening south, while JA land came in a bit late to help out with bonus points. Eric 4EL's sojourn in the bush rapidly drawing to a close; heard Les 4EH coming up with help to dismantle gear for transportation. Hope to see you Eric at the monthly meetings. Frank 4FN unpacked radio gear, first job after recent transfer. Most of the furniture is still to arrive; that's a regular Amateur, looks after his hobby first.

Will try and organise a branch of the W.I.A. in Rockhampton. The numbers are there if they can be collected at the right place and time. Maybe again some one will pen a few notes for "A.R."

Thanks goes to Vern 4LK and Doug 4ZBM on their technical notes appearing in "A.R." during the past year.

MARYBOROUGH

At the January meeting of the Wide Bay and Burnett Branch of the W.I.A., fourteen members were present, including five from Gympie.

The meeting was held at Teddington and members brought their families to this well-known beauty spot.

The Branch has thirteen future candidates for the A.O.C.P., seven at Bundaberg, three at Gympie, and three at Maryborough. The next regular meeting is to be held at Gympie.

A transmitter hunt followed. A transmitter was hidden a mile or so away and four contestants joined the hunt. 4DJ passed within 100 yards of the tx without finding it, and the ultimate winner was Mr. N. Borow, of Gympie.

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SOUTH AUSTRALIA

The monthly general meeting of the VK5 Division for January was held in the club rooms to a very representative gathering of members, in fact considering that VK5 was passing through a heat wave, the number that attended must have pleased both the Council and the guest speaker no end.

The guest speaker was Mr. Bob Roper (5PU) who was listed to speak on the subject of "A.M.," and this was only a brief way of saying that he would discuss the subject of speech clipping and filtering to secure the maximum use of the audio in relation to the carrier. The lecture was particularly interesting and instructive, given in the usual 5PU down-to-earth manner, and judging from the attentive manner of the audience, plus the number of questions asked at the end of the lecture, it can be said without fear of contradiction that the entire members present thoroughly enjoyed it. The vote of thanks to the lecturer, ably performed by Les 5ZCI was received with the applause that it deserved and paid tribute to the amount of time and thought that Bob had put into the lecture.

Very little business of any importance was dealt with, nobody had any grizzles, nobody had any pats on the back to hand out, and the meeting ended officially at the somewhat early hour of 10.25 p.m., although as usual the lights never went out until after 11 p.m.

It is a funny thing, we members of the Division take the splendid roll-up of members to the monthly general meetings somewhat for granted these days, although every visitor always seem surprised to see the number that turn up, come rain or fine. It might pay us to pause sometimes and think why, and then give credit where it belongs, to none other than Council. Without doubt they are the power behind the Division.

The following Council members will have retired as you read this: John 5JC, Jim 5FO, John 5KX and Bob 5PU. All have rendered yeoman service to VK5 and their experience and sagacity will be sorely missed. It is not necessary to be weak in the scone to be a Council member, but it helps, because it is one of the most thankless jobs in the world and the first year is the hardest. One's friends criticise and offer all sorts of advice, but seldom get past the advice giving, one's enemies criticise and refuse advice and then say, "I told you so," and the remainder of the members just sit and think, and sometimes they only just sit. All of which adds up to the fact that a Council member is someone to take off the hat to, and without whom the Division would soon crumble. We thank the retiring members for their service in the past and we all hope that they will continue to render unseen service to the Division that they worked for and made possible.

I spent a very uneasy month after Xmas because I received a tip-off from VK3 that a certain Ken 3AFJ would be spending a short time in our fair city. Now I am not normally a timid person but he has made no secret of the fact that he wants vengeance for the fancied abuse and insults that I have handed out from time to time, and whilst I donned a false beard and walked with one foot in the gutter to simulate a limp, I can honestly say that I was glad when January passed. If I had seen him first I would have made him run, but I doubt if he could have caught me. They don't call me Phar Lap for nothing.

Frank 5LX was heard on 40 mx the other Sunday with an f.b. signal from his mobile-marine set-up, and stated that he was at the moment of transmitting just off Smooth Bay, the northern most point of Kangaroo Island. He was apparently having some trouble with his receiver because quite a number of the boys called him, including 5TN, but nothing doing. Could you use an able seaman, Frank? I could always put my hand out when we went round the corners! (And feed the fish. —Editor.)

Gordon 5XU is still away at Ceduna and is expected back any day now. I listened on and off for his signal on 40 mx, but to date, no go. Probably there has not been enough sun in VK5 lately for his solar powered rig. How funny can I get?

Doug 5KK was heard this month with a solid signal on 40 mx in contact with the mayor of Lucindale (guess who). He used to be quite active on this band about a year ago, but of late has become more interested in the v.h.f's. rather than the h.f's.

Vic. 5JH for an oldtimer is still more than keen on our grand old hobby, judging by the amount of time that he still spends on the air. I don't like to think of how long ago it is since I used to call into the little shop next to the Norwood school for a chat with him. He is still keen on photography too, judging by his QSL card and the last time I saw him he looked about 21 years old.

My cloak and dagger man from the Upper Murray area apparently thought that I am the v.h.f. correspondent for the magazine, judging by the entire contents of his monthly report. I dare not write anything of what he said, because I thought that the attitude of the regular v.h.f. scribe was decidedly cool at the last meeting, and I would not offend him for anything, although I did think that the kick on the shins he gave me as I passed him was not altogether accidental. The only news that I have of any value is that Tom 5TL became so mixed up with the Xmas and public holidays that he went into his shack and industriously sent slow Morse code practice to his invisible audience of the air for the prescribed 35 minutes, only to discover at a later date that he was 24 hours ahead. That's what an office management course does for you!

Listened on 80 mx the other night in the hope that I might pick up a bit of news of the VK5 boys that might be on this band. Listen as hard as I could, I seemed to hear nothing but VK3s working among themselves. I was quite surprised at this because this band always had a few regulars from the country districts of VK5 whenever I used to listen, to say nothing of several city diehards. I checked again about an hour later and still the same. Has Johnny 5KO heard about this?

By the time that you are reading this, John 5JC, our venerable Secretary with the golden spectacles, will have signified his intention of resigning from that position. During his period of office he has done an excellent job and he will be missed by all who have had dealings with him. Wally 5DF has been busy shuttling back and forth to Cowell (Franklin Harbour to you) in connection with his employment. This will explain the reason for his inactivity on 40 mx of late. Pat 5LT was last heard of in the Upper Murray district on something of a walkabout nature. He has sold his house at Port Lincoln and moved on for good and it would appear that his accustomed position in the 14 Mc. band will be unoccupied for a while.

John 5JM is not very active but could be enticed on again at any time. He only has a low power rig going at the moment. Lance 5XL maintains his usual steady pace with Amateur activity, but judging by the scooper-dooper t.v. aerial on top of the roof at his QTH, he has acquired a certain amount of interest in another direction. Bob 5BG is still rushing hither and thither with his t.v. aerials, and the ideas about the one-eyed monster flowing through his brain keep him so busy these days that Amateur Radio is getting something of a poor deal. His XYL remains quite unperturbed however, she knows her Bob!

Peter 5FM has been down to the city recently but no reports as to his activity on the air have been received at the time of writing. Ern 5EN and a band of enthusiastic workers were decidedly active on the communication side of the recent Flinders Ranges bushfires. They were mentioned several times in the A.B.C. news during the fires. Nice work OM.

The social notes this month carries news of great doings down Lucindale way. It appears that Luke 5LL spent the Xmas period at the QTH of Arch 5XK, who turned on the official welcome at the railway station in fine style. He borrowed the biggest and newest car in the district and drove straight up to meet Luke, who stepped off the train attired in a pin-striped hessian lounge suit, with the new falling waist line, the trousers of which, in a gesture to the prevailing beatnick fashion, he wore back to front. Midst the cheers and acclamation of the crowd, he seated himself in the back seat of the outsize in cars and at this moment disaster struck. Arch, in his haste and eagerness to borrow the car, had not bothered to find out how to reverse it, and the whole welcome scene crumbled to earth, with Luke, reversed trousers and all, pushing the car round and round the station yard until it pointed the right way for straight driving. Arch did not know what he was doing, Luke did not know where he was going, and the crowd, taking Luke's trousers as a guide, were just as mystified. I have sworn evidence as to the truth of the above and can only say, "Boys, could we have a little more dignity and decorum at the next welcome?" After all, it could have been me!

Heard Ted 5JE calling CQ on his beloved 40 mx the other day. He had a good signal and by the sound of his voice was prepared to do battle with all and sundry concerning the merits and de-merits of popularising this band. John 5JN has been putting his annual leave to good effort by painting the roof of his home QTH and also accumulating his share of sunburn in the process. When the sun became too hot for roof work, he could always retire to the shack to cool off. Wily birds these Woomera birds, especially when on leave! Tim 5TJ heard the other Sunday on 40 with a particularly strong signal from Clare. So much so, that the city station he was working

was heard to remark that he thought the signal was coming from across the suburbs. I must agree with him Tim, I thought that you were closer than you are.

Frank 5MZ was heard on 40 giving a blow by blow description of his recent trip to VK3. He hotly denied that he had to be led to all the chairs in VK3, every time he wanted to sit down, for fear that he would sit down on the floor instead of the chair. What was the trouble Frank? Vertigo, impetigo, or just plain give it a go! Max 5OS still consistently heard on the air at various times and never short of a contact. From my listening in to his mail, I gather that he has a number of spies in VK3 and always is well to the front with the news concerning the visiting VK5 boys. Carl 5SS was heard complaining of rx trouble the other Sunday morning, but I tore myself away quickly for fear that I would hear of birds without legs or birds with legs, or something along those lines, being found nesting in the 6V6 or alongside the 80.

John 5ZC has now added another tube to the final and has joined the ranks of the parallel finals. He admitted under questioning, however, that he has not been very busy of late on the air. Ken 5IM heard from down Lucindale way via the signal of Arch 5XK and understand that he was paying a flying visit to the S.E. and catching up with as many of the local boys as possible in the limited time. Bernie (better known as 5WC) is now a little on the quiet side since the Woomera club house has been re-established on a somewhat temporary basis. He was conducting the club's transmissions from his QTH for quite a while and apparently lacks the energy to trot over to the club house these hot days. He has certainly done his utmost to keep the 5WC flag flying, in fact he is better known as 5WC than Bernie, and that is sufficient praise.

The 1960 members of the Advisory Committee have been announced as: Gordon 5XU, Bill 5HR and Barry 5ZBZ. A good choice methinks, and one that can be expected to temper justice with mercy. This Advisory Committee has proved quite a good recruiting ground for new members for the Division over the past years, and rumour has it that W.I.A. non-member representation on the committee is becoming harder and harder to get. When Joe 5JO was on the committee he used to start his W.I.A. campaigning at the first meeting of the committee and never let up until he got his men. How low can one get!

Heard Howard 5XA on 40 mx recently. Was quite surprised because he has not been on this band for some time, usually frequents 21 and 14 Mc. Am only guessing, but would say he has not been on 40 since about 1939. Right Howard? Bob 5KT was heard fixed portable from Tumby Bay on 40 mx. He was operating from a tent, upon which the rain was falling steadily, and as he and a companion (name unknown) had just blown up a hydrogen balloon for some aerial tests, the tent was a little congested. There was some suggestion that he could not have a smoke on account of the balloon, but he felt that he could not last out much longer. I stuck around in case the balloon became temperamental, but as usual with me, no bangs, no nothing. Life is so peaceful!

Neil 3HG passed through our fair city, returning from VK6, and called in to see Cec. 5BZ early in January. His wife is apparently addicted to the bad practice of skimming through the VK5 notes and was sorry that no time allowed an opportunity of meeting the alleged author. Neil was a wake-up and took no chances of lingering, and when last seen was tearing through the Mt. Lofty Ranges at about 90 m.p.h. It is remarkable the effect that my reputation as a lady's man has on the visiting Amateurs and their XYLs. Pass me my eyebrow pencil, please.

Port Lincoln was apparently the focal point of the VK5 Xmas holiday makers, judging by the number that signed the visitors' book at the 5DF QTH. They included such infamous, sorry, famous names as Gordon 5XU, Graeme 5XV, Brian 5TN, Barry 5ZBZ and Al 5ZCR. All said that they reckoned Port Lincoln would be an extra good place for DX working but did not stay long enough to show how it could be done!

Incidentally, Wally 5DF has been granted permission to operate his rig from the grounds of the Port Lincoln Trades and Industries Fair on Friday and Saturday, March 25 and 26. He will be operating on the 7 and 14 Mc. bands, will be v.f.o. controlled, operating times will be 1000-2000 hours approx., and a special QSL card will acknowledge all contacts. Keep it in mind, boys, and help him to put Amateur Radio on the Port Lincoln map.

No news from the S.E. gang this month, but it is probably just as well, because a number of loyal citizens rallied around this month and news was aplenty, so much so that the splendid, upright, sincere, reliable, kind, and handsome editor is probably tempted to use his red pencil. Anyway gang, thanks a million for your news and always remember, every little helps, a sentiment expressed for many years by a monkey well known to many of us.

Oh! I nearly forgot. One of my female operatives, Hata Mari by name, informs me with bated breath that Doc 5MD is a victim of the "one-eyed monster" and that Cec. 5BZ is busy debating the merits of two well known makes before making the momentous decision. My cup of bitterness is full, these were the two that I counted on most to keep the flag flying. Just think of it—Wyatt Barbier and Have Gun Will Travel Baseby. Sob-sob-sob.

— . . . —

TASMANIA

We extend our sympathy to Roy 7RN upon the death of his father in early January this year. Barney 7ZAK has stolen the limelight for January with his 288 Mc. contacts to VK3 from the pinnacle of Mount Wellington. We admire your courage in going up to the pinnacle on the second occasion, Barney, when a violent storm broke and destroyed your ten element array. Your efforts have done a lot to increase interest in the v.h.f. bands here. Incidentally, a v.h.f. group is in the course of organisation in the south, with a separate meeting night, probably the third Wednesday in each month, at our club rooms. More of this later, as plans come to fruition.

The annual general meeting and dinner of this Division will be held at Ulverstone, on 19th March, so don't forget this date chaps, and come along and make it a bumper affair. Hope to see you all there.

It was good to hear Roy 7RK during the Sunday morning round-up after the Institute broadcast. The end of February saw the completion of one year since our members in the south commenced voluntary radio duty with the St. John Ambulance. During that time, their efforts have saved about £5,000 from the cost of conveying the sick and injured to hospital, a really worthwhile community service performed by four of the southern members during February was the provision of portable transmitters, their staffing and operation at the Hobart Regatta.

Tom 7FM is now in the employ of the A.B.C. and has started the study of t.v., that will keep you out of mischief, Tom.

We in the south were fortunate to have a remarkable address from Dr. Grote Reber at our February meeting. Dr. Reber is still the only true radio astronomer in the world, and he is in Tasmania at present to set up a receiving station at Kempton for the investigation of cosmic radio emission on 520 and 143 Kc. and possibly another frequency if a suitable vacant spot in the low frequency spectrum can be found. He will be using full wave antennae at these frequencies and the receivers will have band passes of 3, 6 and 12 Kc. Dr. Reber is setting up a similar station on Macquarie Island and he illustrated his address to us with slides from that place.

We experienced several auroras during January and I was staggered to hear Africa and Europe pounding through on 7 Mc. the morning after each display. Fine DX could be your reward for a look at that band in the mornings.

Snowy 7CH has acquired a Geloso receiver with two stages of conversion, and is finding it admirably selective. Bob 7OM has a new and very stable v.f.o. in operation. Both Bob 7OM and Snowy 7CH had a son married during January. We wish them both every happiness for the years ahead. Lon 7LJ has been on holidays down at Cremorne at the end of January.

NORTH WESTERN ZONE

Well here we are well into 1960 with very little improvement as yet in the 80 and 40 mx bands, but keep hoping chaps, for on past experience, they inform me that they will come good.

Our last meeting was held on Feb. 2 at the usual place with 18 members being present. One visitor was with us in the person of Richard Rogers, an associate from the Southern Zone, and he was duly made welcome. Hope you got home safely with the half sheet of aluminium, Roger.

For the benefit of Hams visiting us here on the North-West Coast, we want them all to know they will be made very welcome at any of our meetings which are held on the first Tuesday in every month at Lakins Hall, Ulverstone, at 8 p.m.

A working bee was held at the Fire Brigade rooms at Devonport on Feb. 9 where we sorted out all the bits and pieces, etc., in conjunction with the radio equipment for the Burnie Fire Brigade. A goodly number attended and those that cpuldn't find a loaded condenser to hang on to, asked intelligent questions and I think the purpose of the meeting was achieved. We all hope it will not be long before the Burnie Brigade is radio controlled.

Several of our associate members had a shot at the January exam. and are anxiously awaiting notification of results. I guess their fate will be known before this appears in print, anyway, best of luck to you all.

It has been decided to hold the Division Annual Meeting and Dinner at Ulverstone this year on Saturday, 19th March. We are hoping for a huge success. We are relying on all members within the Division to make their annual effort and attend.

So please put a ring around the aforementioned week-end on a very prominent and large calendar and do your utmost to be with us. See you at the meeting.

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FOR SALE: Pye V.h.f. Mobile Xmitter f.m., 156-172 Mc., xtal controlled, compl. with 829B and vibrator supply £6. AT5 Xmitter £4. W. Kerr, 17 Jasper Street, Noble Park, Vic.

FOR SALE: Television Oscilloscope, as per Anniversary Issue "Amateur Radio," Oct. 1958. Offers to F. R. Gale, XY 6480 (Sydney).

SELL: Advance E2 Sig. Gen. £40, Taylor Valve Tester 45C £45, University Sig. Tracer £45. D. F. Dawson, 95 Fairfield Rd., Elizabeth Sth., S.A.

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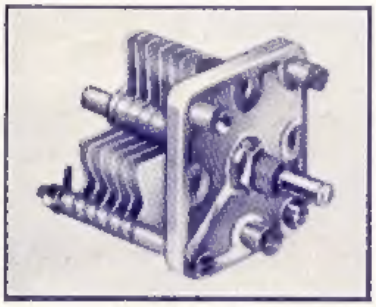

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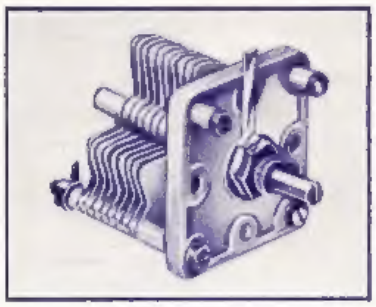

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Cat. No.	Type	Capacitance (pF.)		Proof Voltage	Air Gap (ins.)
		Min.	Max.		
815	Single Section	7.5	67	1,700	0.048
816	Single Section	9	190	1,000	0.024
817	Single Section	11	270	1,000	0.024
818	Butterfly	6.5 per section	31	1,700	0.048

Cat. No.	Type	Capacitance (pF.)		Proof Voltage	Air Gap (ins.)
		Min.	Max.		
831	Split-Stator	9	28	2,500 per sect.	0.080
832	Split-Stator	9	51	2,500 per sect.	0.080
833	Split-Stator	18	97.4	2,500 per sect.	0.080
834	Differential	8.9	73	2,500 per sect.	0.080
835	Single Section	17.6	237.3	1,250	0.040
836	Single Section	13.6	112	2,500	0.080
837	Butterfly	13.5	53	2,500	0.080
839	Single Section	28	390	1,250	0.040

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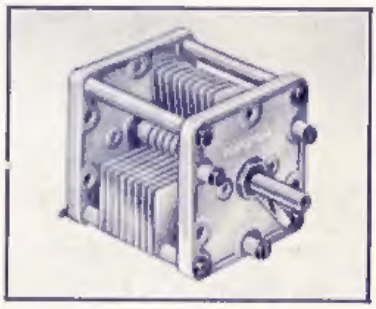

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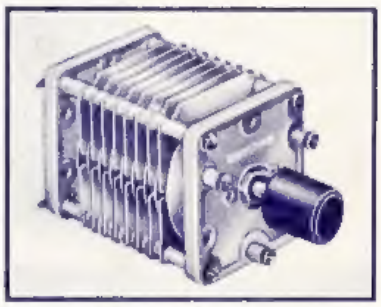

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